Before installation Begins

What is SPR Smart Viewer Program?

SPR Smart Viewer Software program enables you to detect from remote site without having to go to the place where DNE(SPR Smart View System) is installed.

Outline of System (Recommendation)

- CPU : Celeron 433MHz or more
- MEMORY : 64MB or more
- VGA CARD : AGP 16MB or more
- HDD : enough space to hold more than 100MB
- O/S : Windows98 SE / Windows ME / Windows 2000 / Windows XP
- Communication line : LAN, MODEM, ISDN, exclusive line
- DirectX : V7.0 or higher

Product Must Include…

Below items must be included with SPR Smart Viewer program.

SPR Smart Viewer Program

User Manual

Table of Contents

5 I. SPR Smart Viewer Operation
7 1. SPR Smart Viewer program setup
10 2. Execute SPR Smart Viewer program
11 3. Main Screen
12 4. Communication Environment Setup
17 5. Communication Connection Viewer
30 6. Call Current Image
31 7. Communication Disconnection Viewer

33 II. Search Mode
35 1. Run Search Program
36 2. Search Date and Time Selection
37 3. Camera Selection
38 4. Playing Recording
41 5. Search Tool
42 6. Data Backup
53 7. Print Search Screen
55 8. Pan/Tilt Mode
56 9. Search Backup Data
58 10. Audio Replay
59 11. 2Way Audio

61 III. Remote View(DNE) Setup
63 1. Hardware
69 2. System
80 3. Recording Schedule
84 4. Motion Detection

87 IV. Remote Backup Server
88 1. Remote Backup Server

93 V. Intelli Upgrader
94 1. Intelli Upgrader

99 VI. Health Monitor
100 1. Health Monitor
102 2. Tool bar
107 3. Tab

113 VII. Emergency Monitor
114 1. Emergency Monitor
115 2. Tool Bar

117 VIII. Web DV R
118 1. Accessing WebDVR
120 2. Function of WebDVR

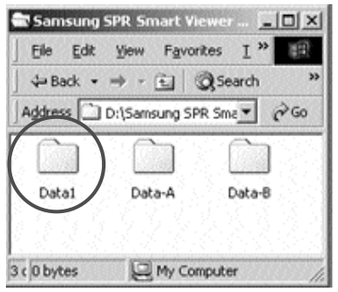
121 IX. Appendix
122 1. Installing Center PPP in Windows98
126 2. Installing Center PPP in Windows 2000/XP
131 3. Formatting CD Using Direct CD
135 4. Formatting CD Using InCD
138 5. System Setup for Audio Function

I

Operate SPR Smart Viewer

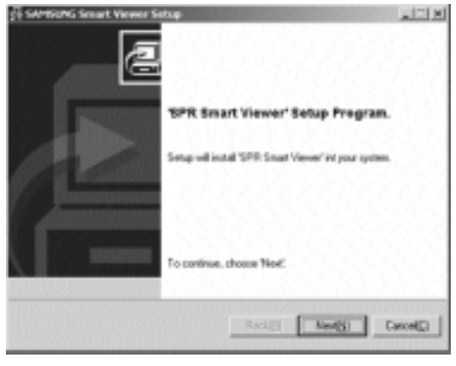
1 SPR Smart Viewer Program Setup

1. Insert SPR Smart Viewer program CD into CD-ROM and click on folder where program is stored, then window below will appear. Double click on 'Data1' folder.

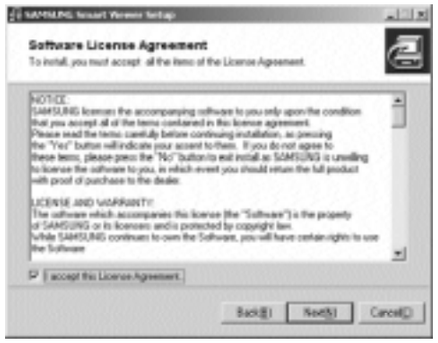


2. Double click on Setup.exe file.

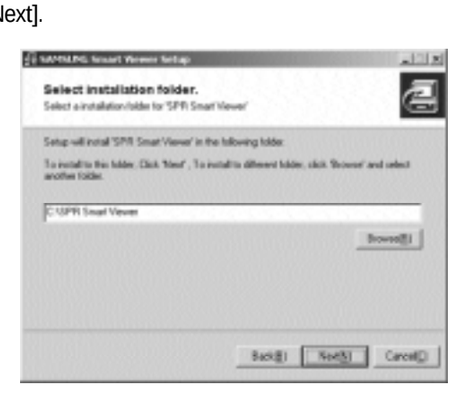
3. Select [Next].



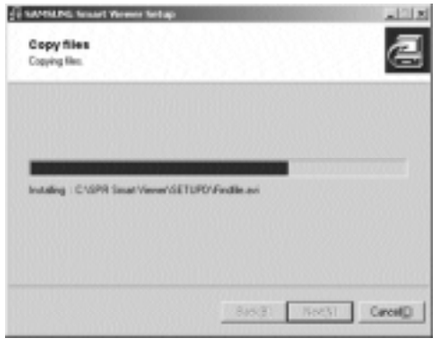
4. Select 'I accept this License Agreement..' and then click [Next].



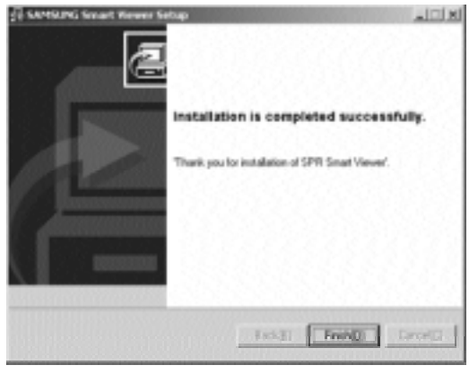
5. When "Select installation folder" window appears, browse or select installation folder and click [Next].


Select installation folder.
Select a installation folder for 'SPR Smart Viewer'
Setup will install 'SPR Smart Viewer' in the following folder.
To install to this folder, Click 'Next'. To install to different folder, click 'Browse' and select another folder.
C:\SPR Smart Viewer
Browse(R)
Back(B)
Next(N)
Cancel(C)

6. It will starts to process and copy Program file.



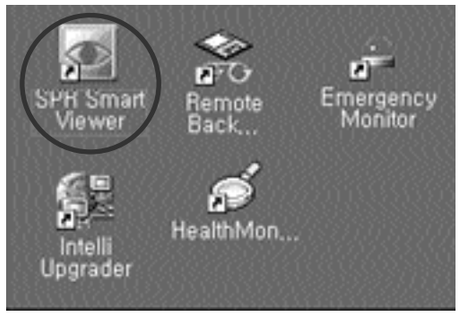
7. Select [Finish] after program is installed.



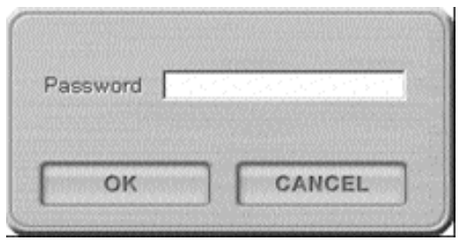
8. SPR Smart Viewer icons will be created on the desktop.
   Double click on SPR Smart Viewer icon to execute program.

2 Execute SPR Smart Viewer Program

1. Double click on SPR Smart Viewer icon from the desktop and execute program.



2. Start SPR Smart Viewer and check the password.
   Password is not setup initially so click [OK].

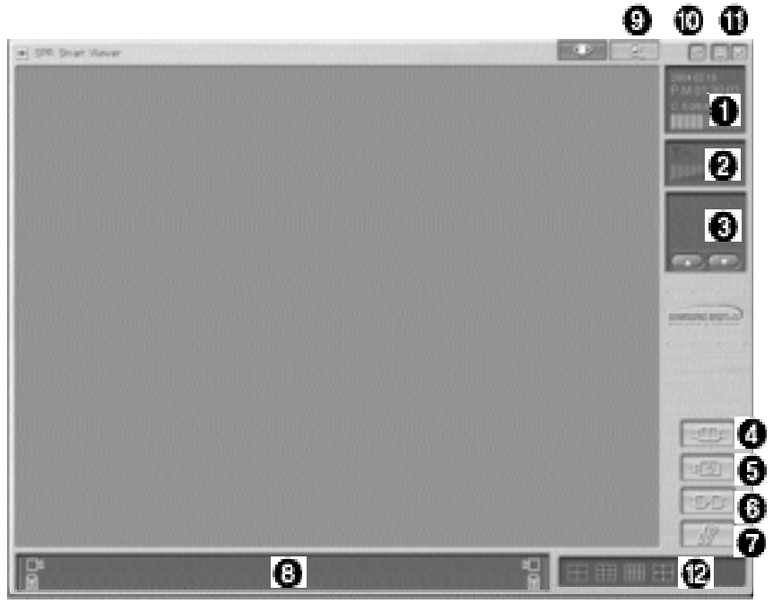


[Warning]

- Password cannot be recreated so do not lose your password
  (Password should also be written separately)
- No more than one person should have the password information

Refer to page 14 for password information

3 Main Screen



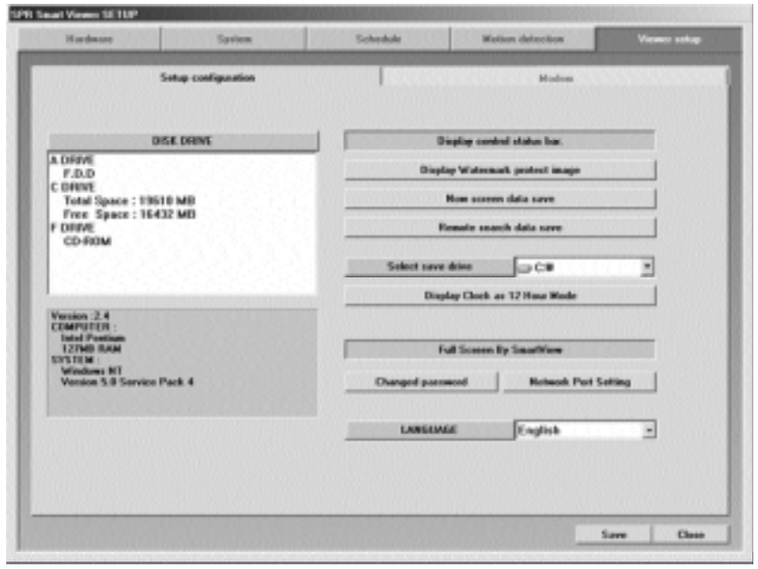
Description

❶ The present date, day, and time are displayed.
❷ Indicates status of send/receive data between SPR Smart View and Viewer
❸ The IP address of the connected DNE and the name of the installation place are displayed
❹ A button to connect the SPR Smart View
❺ A button to display are current image to connect the SPR Smart View
❻ A button to disconnect the SPR Smart View
❼ A button to make settings when connecting the SPR Smart View and Viewer
❽ The camera number and the controller are displayed when the SPR Smart View is connected
❾ A button to enter into Search mode to search the backup data and the data of the SPR Smart View
❿ A button to make settings to use 2-way audio feature when the SPR Smart View is connected.
⓫ A button to exit the SPR Smart Viewer program
⓬ A button to enter into 4, 9, 16-division and full screen modes.

4 Communication Environment Setup

Setup Communication Environment using the button on the left

Viewer setup's [Setup configuration] Screen



Description

DISK DRIVE

: It has Driver information.

SPR Smart Viewer's Program and system information appear.

See manual control status bar

: Indicate status of manual control button from initial screen

- ▶ Manual control status bar button is pressed: manual status is indicated
- ▶ Manual control status bar button is not pressed: status is not indicated

Check Water-Mark Authentication

: You may indicate Water-Mark authentication image on searched image.

- ▶ When button is pressed: Water-Mark authentication is indicated on the image
- ▶ When button is not pressed: Water-Mark authentication is not indicated on the image

Storing current image

: When transmitting current image after connection is made, the image will also be stored in hard disk drive (assigned through Viewer) at the same time.

- ▶ When button is pressed: Current image is stored
- ▶ When button is not pressed: Current image is not stored

Storing searched image

: When searching for recorded image and connection is made to View, it will also be stored in hard disk drive at the same time through viewer.

- ▶ When button is pressed: Current image is stored
- ▶ When button is not pressed: Current image is not stored

Select a drive to store

: When searching for current or recorded data after connection is made to View, you must select hard disk drive which will be stored to Viewer.

☞ **[Note] Recordable media**

From Hard disk or window, you may store with removable drive (DVD-RAM, ZIP, MOD, ORB, USB HDD etc) and with Network drive.

Full Screen By SmartView

: This is a function to integrate Full screen function of SmartView with SmartViewer.

- ▶ When button to pressed : Intergrate with Full Screen function of SmartView
- ▶ When button is not pressed: Do not integrate with Full Screen function of SmartView

☞ **[Note] Full Screen function**

This is a function to display a full screen image of the camer of the camera or sensor that the has motion activity or sensor signal.

Clock - 12 Hours or 24 Hours Mode

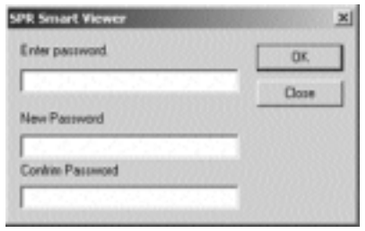
: To convert clock mode - 12 Hours or 24 Hours. When 24 Hours mode is in use.

AM/PM will not be displayed.

Change Password

: This function is to change password.

(Tip: The password is initially not setup)



① Enter current password and click [OK]

② Enter new password and click [OK]

Store

: Finish Setup configuration and click [Save]

Close

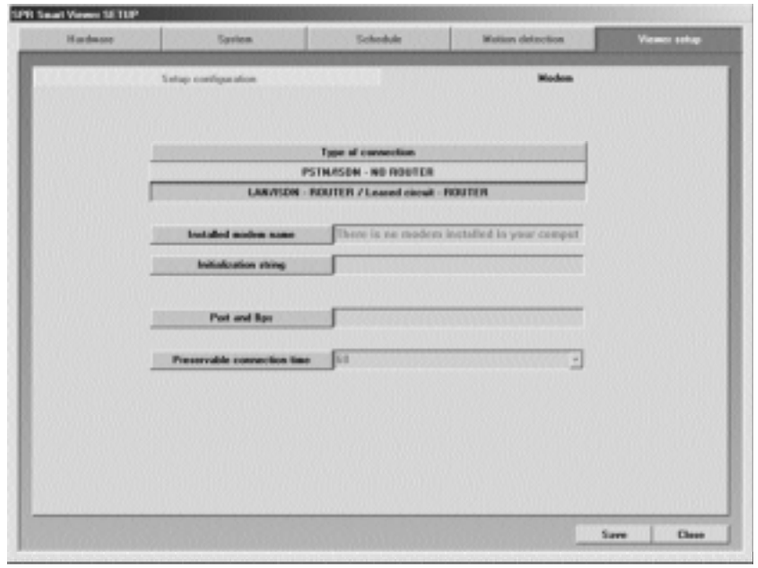
: It will return to Viewer's main screen when you click on [Close]

Language

: It supports multiple language - Korean, English, French, Chinese, Italian, Spanish, and German

Example) Select one of the language that you want to use and click on [Save].

SPR Smart Viewer [Modem] Screen



Description

Select Type of connection

: Select the type of communication line you wish to use.

▶ Select 'LAN/ISDN(ROUTER)/LEASED CIRCUIT(ROUTER)' when you are using LAN or ISDN/Exclusive (using ROUTER).

▶ Select 'PSTN/ISDN (NO ROUTER)' when using general telephone line or ISDN (without ROUTER)

[Installed modem name]

: It automatically recognizes the modem installed in the system.

[Initialization string]

: It automatically recognizes initial order from windows installed to the system

[Port and Bps]

: It automatically recognizes communication port and speed of modem installed to the system.

[Preservable connection time]

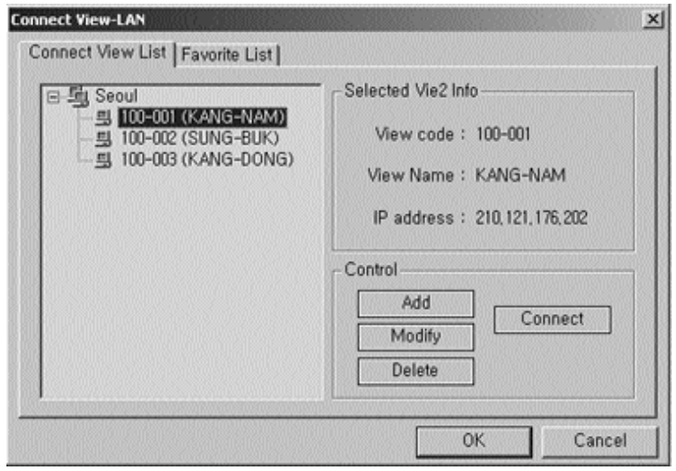
: If time expires while phone is connected without any manipulation, it will automatically be disconnected.

5 Communication Connection Viewer

Select this button on the left and connect to DNE

☞ **Basis of LAN connection**

SPR Smart Viewer Screen connection



Description

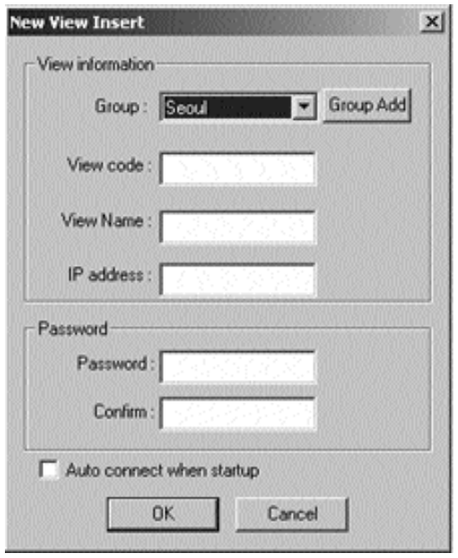
Connection List

: In order to connect to DNE, select [Add] button and register following: group, View CODE, IP Address, place to be installed, and password. That way, if you have to connect to DNE again, then it can easily be connected to appropriate DNE from the list you made.

Add

: Add the Site(DNE) you wish to connect.

▶ Select [Add] button and assign View Code, IP address, place to install, and password, then click [OK].



▶ [Group] : You can assign group for any View(DNE) information Entered

▶ [Group Add] : Make a new group for any View(DNE) information Entered

▶ [View Code] : View Code can be added in the order of 100-001,100-002,100-003...etc.

▶ [View Name] : Enter Place of installation

▶ [IP Address] : Enter DNE's IP address

▶ [Password] : Enter password for DNE Menu (Network → Password) Password

▶ [Confirm] : Enter password for DNE connection

▶ [Auto connection when starting] : When executing the Viewer, this function allows to connect to View automatically.

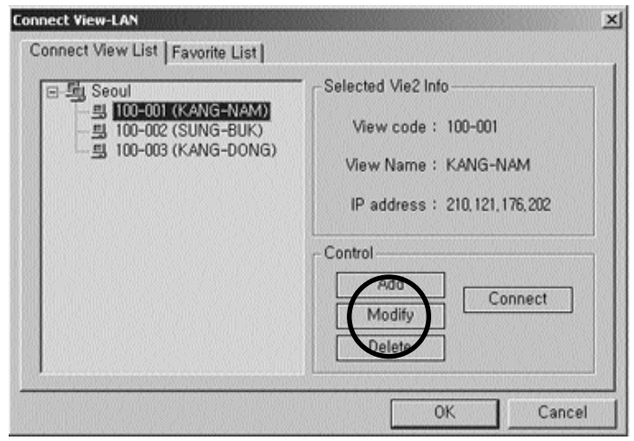
[Warning]

While connecting to DNE from SPR Smart Viewer, it will auto-check the View CODE and password and if they are not correct, connection will fail.

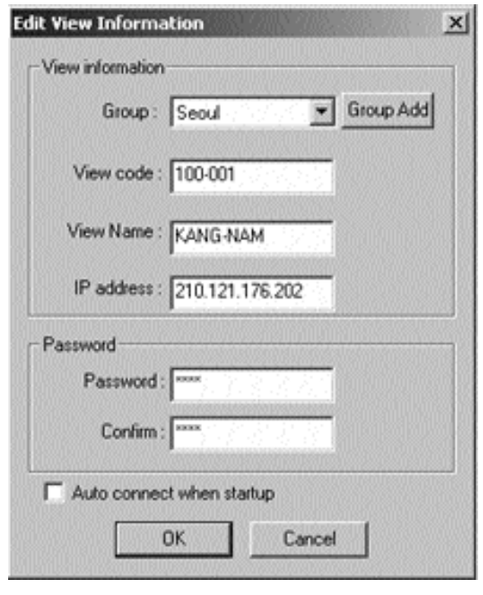
Modify

: Modify DNE information which is/are already entered.

▶ Select DNR information you wish to modify and click [Modify].



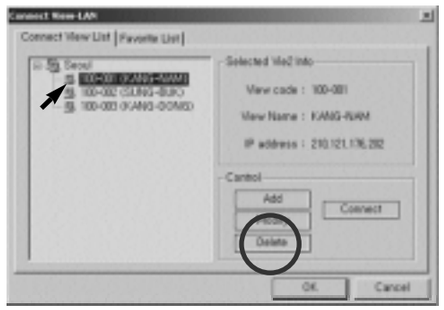
▶ Modify DNE information and select [OK] to store modified information.



Delete

: Delete DNE information.

▶ Select appropriate DNE and click [Delete]



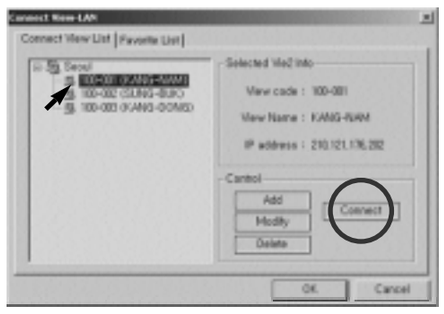
Cancel

: Go back to main screen after closing Connect View LAN window.

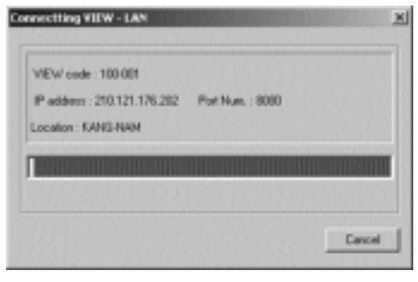
Connect

: Connect DNE from SPR Smart Viewer.

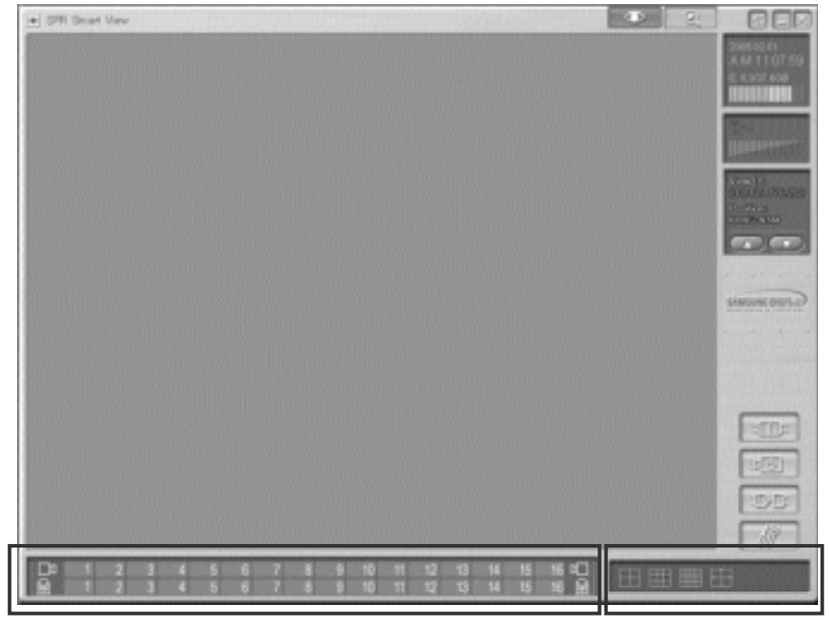
▶ Select the DNE you wish to connect and click [Connect]



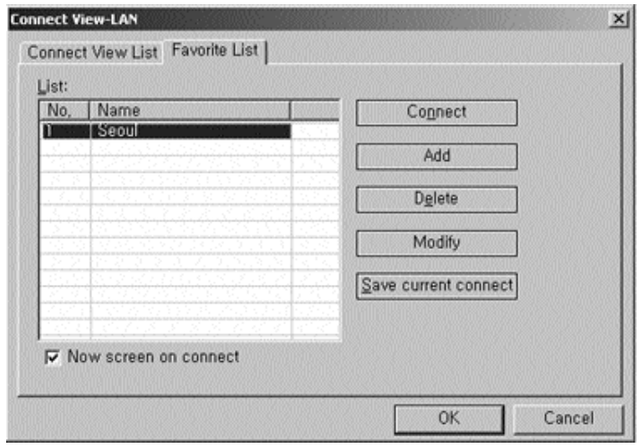
▶ It is being connected to DNE



▶ Screen below appears to DNE along with DNE's camera number, Control indication button, View IP, and Position.



SPR Smart View Favorites



Description

List

: This shows the Favorites list registered by the user. After selecting [Add] button, if you enter the DNE information the 'Name' item from 'Favorites Edit' screen and save it, this will be added to the Favorites list

Connect

: After selecting the desired item from the list, select [Connect] button. You will be connected to the DNE linked by the selected item.

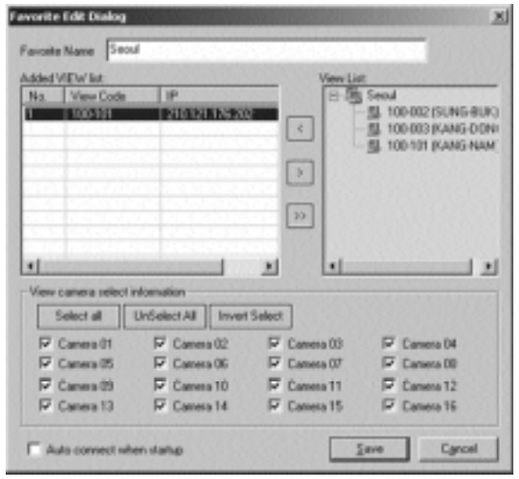
Add

: This is to add the favorites name to the list.

▶ After selecting [Add] button and selecting the list of 'View' item from 'Favorites Edit' screen, press [<] button to add the selected View information to 'added View' item.

▶ After selecting the registered View information from 'added View' item, select the desired camera no. to call from 'View camera select information' item.

▶ After selecting the name to 'Favorites name' item, press [Save] button.



▶ [Favories name] : To enter the name to register in the favorites list.

▶ [Added View list] : This is a list to be registered if you select the desired View for from 'View List' item and the then press [<] button.

▶ [View list] : This shows the View list registered in View.

▶ [<] button : If you select the desired 'View' item and the press [<] button, the information of the selected View will be registered to 'Added View' item.

▶ [>] button : If you select the View information to delete from 'Addde View' item and then press [>] button, the View information will be deleted from 'Added View' item.

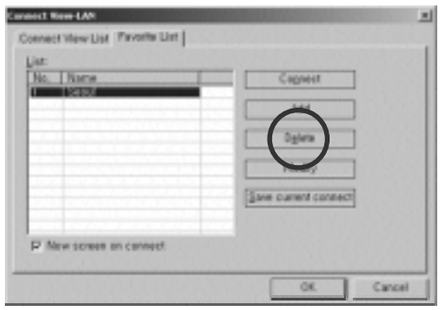
▶ [>>] button : If you press [>>] button, all View information from 'Added View' item will be deleted.

▶ [View camera select information] : When executing the Viewer, this function allows to View automatically.

Delete

: This is to delete the registered Favories name from the list.

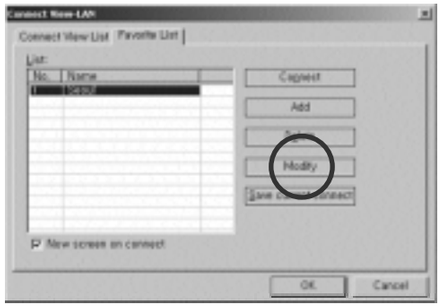
▶ After selecting the desired Favorites name to delete from the list, press [delete] button.



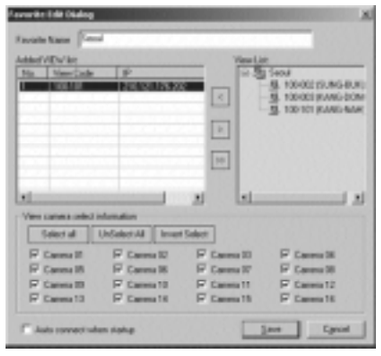
Modify

: This is to modify the View information of the Favorites name registerd in the list.

▶ After selecting the desired Favorites name to modify from the list, press [modify] button.



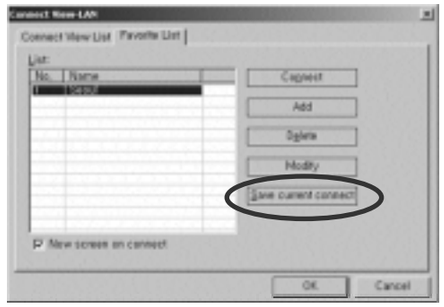
▶ After modifying the Favorites information, select [Save] buton to save the contents.



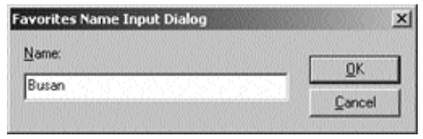
Save current connect

: If you select [Save current connect] button in the stae of connecting with DNE corrently, the connected DNE information shall be registered in the Favorites list.

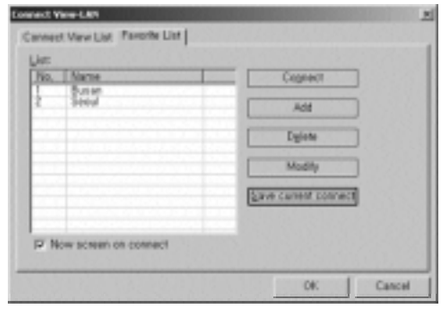
▶ If DNE is connected, [Save current connect] button will be active. At this time, press [Save current connect] button.



▶ If “Favorites name input” screen is displayed, enter the Favorites name and click [OK] button.



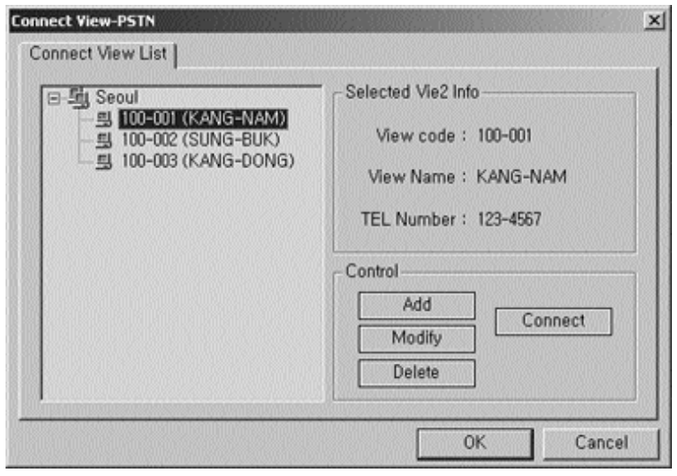
▶The entered Favorites name shall be registered in the list.



From the communication enviroment tab of Viewer setting, the line type shall be selected by “PSTN/ISDN(NO router)”.

Select button to connect to View

SPR Smart Viewer Screen connection (PSTN)



Description

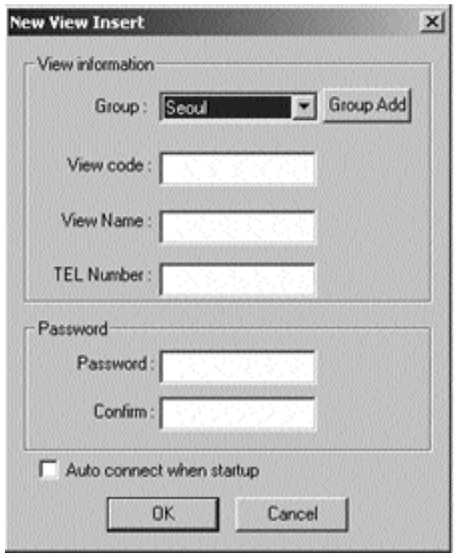
Connection List

: To connect to View, select [Add] button and enter Group and View code, IP, Tel no. , Installation please, password etc. to register in the connect list. This enables you to connect to connected View easily when you try to connect to View later.

Add

: This adds the information of the desired View to connect.

▶ Select [Add] button to designate View Code, IP , Installation place , password and then select [OK] button.



▶ [Group] : You can assign group for any View(DNE) information Entered

▶ [Group Add] : Make a new group for any View(DNE) information Entered

▶ [View Code] : View Code can be added in the order of 100-001,100-002,100-003...etc.

▶ [View Name] : Enter Place of installation

▶ [TEL Address] : Enter DNE’s IP address

▶ [Password] : Enter password for DNE Menu (Network → Password)

▶ [Confirm] : Enter password for DNE connection

▶ [Auto connection when starting] : When executing the Viewer, this function allows to connect to View automatically.

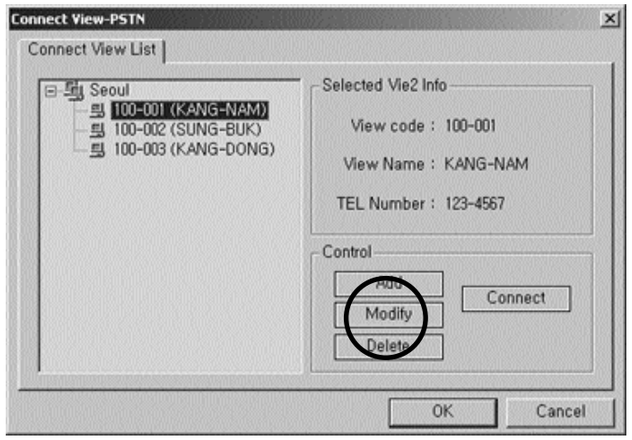
[Warning]

While connecting to DNE from SPR Smart Viewer, it will auto-check the View CODE and password and if they are not correct, connection will fail.

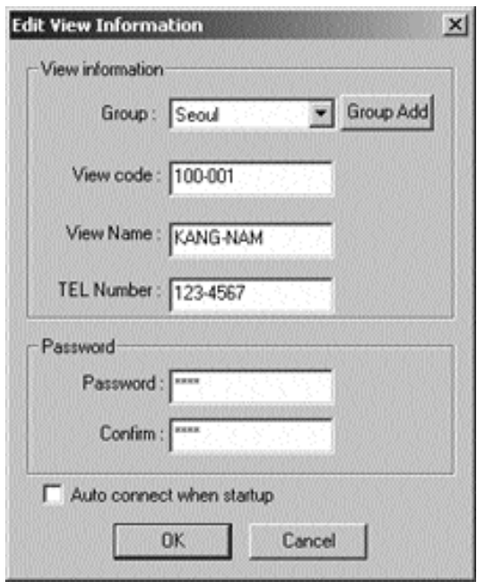
Modify

: Modify DNE information which is/are already entered.

▶ Select DNE information you wish to modify and click [Modify].



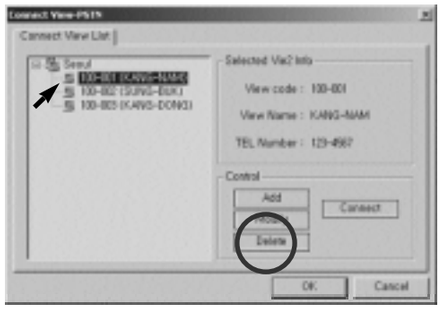
▶ Modify DNE information and select [OK] to store modified information.



Delete

: Delete DNE information.

▶ Select appropriate DNE and click [Delete]



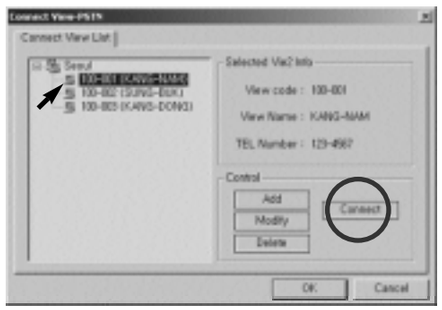
Cancel

: Go back to main screen after closing Connect View PSTN window.

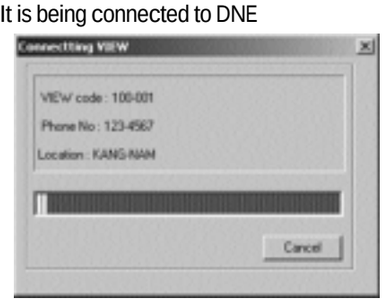
Connect

: Connect DNE from SPR Smart Viewer.

▶ Select the DNE you wish to connect and click [Connect]



▶ It is being connected to DNE



6 Call Current Image

① Select camera number to be shown.

(Installed camera will not be indicated on screen)

② Show Camera image by selecting button from DNE.

When current image is selected

[Note]

When button is selected without selecting camera button, an error message below will appear.

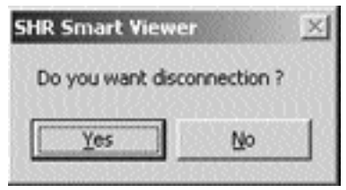
7 Communication Disconnection Viewer

Select this button on the left and disconnect to View.

Communication disconnection on calling current image

: if you select disconnection button on calling current image with connection to DVR(SPR Smart View), the Winodws below appears.

Select [OK] button and when “Do you want disconnection?” windows appears, select [Yes] button and disconnect with View.



Communication disconnection

If you select disconnection button only on connection to DNE not calling current image,

”Do you want disconnection?” windows appears. Select [Yes} button and disconnect with DNE.

II

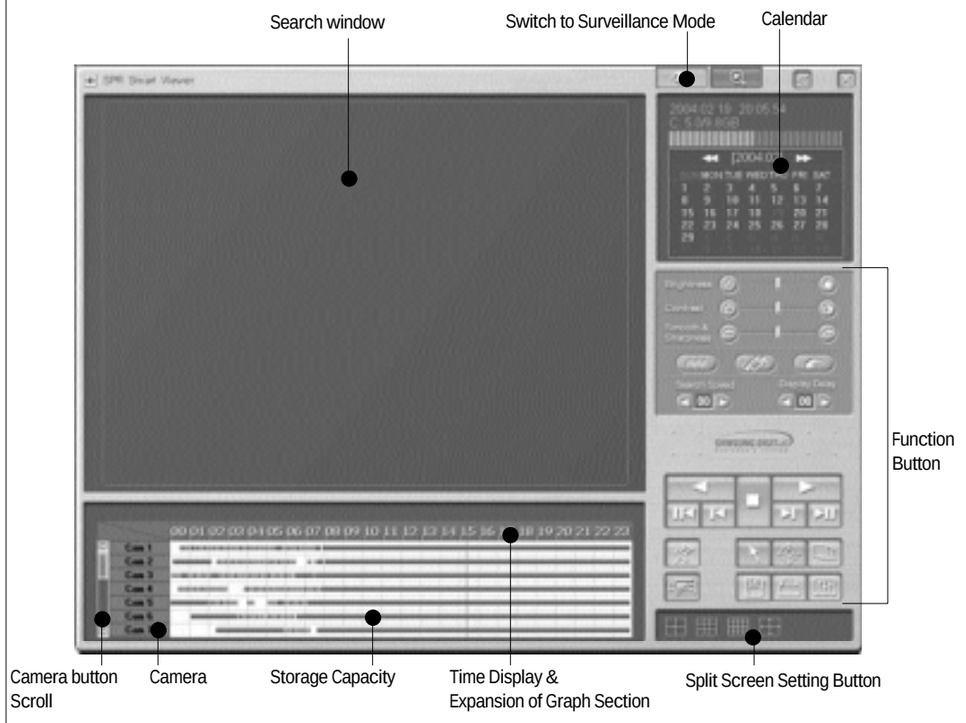
Search Mode

1 Run Search Progra m

① Click on search button to execute from surveillance screen.

② Password screen will appear for securing purpose Click [OK] if the password was not initially entered

Search Screen



Configuaton of Search Screen

- ▶ Search screen Window
- ▶ Time display & expansion of graph section
- ▶ Switch to monitoring mode
- ▶ Scroll and Camera button to select a camera to search
- ▶ Graph indicating the type of recording & storage by tme zone
- ▶ Calendar which shows recording date
- ▶ Function button for search
- ▶ Split screen setting button

2 Search Date and Time Selection

Calendar

Search 'Date'

: Choose the Date you wish to search

▶ << : It shows whole calendar

>> : Calendar shows the following month

▶ On calendar, it will be indicated in yellow if anything is recorded on such date, red indication means the one you clicked to search, and sky blue indicates that something is being recorded.

Time indication and Expansion of graph region

Time indication and expansion of Graph region

: It indicates time for the part where data is recorded.

▶ When you click on time, time zone will be expanded in three steps so graph region can been seen more clearly.

▶ In case such country is applied with Summer Time, color will convert from Yellow (default color) to pink but it will convert back to Yellow as soon as the Summer Time is over.

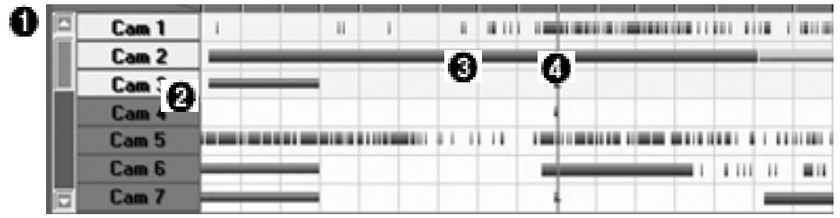
▶ Any modification of time caused by Summer Time will automatically change back to current (actual) time.

☞ **[Tip] What is Summer Time...**

Sun rises early but sets late during summer so people tend to take advantage for this longest period of daytime of the year by forwarding one hour which is known as Summer Time. Summer time is widely used throughout the world and people forward one hour earlier than actual time at the beginning and do the vice-versa at the end of Summer Time. For example, if the starting time is 2 o'clock then you are to change the time to 3 o'clock and then change 3 o'clock back to 2 at the end.

3 Camera Selection

Camera Selection Screen



Description

1 Camera Scroll button

: This function is to scroll search button from up and down.

2 Camera

: Choose the camera number you wish to search

▶ When you double click on camera number, button and the colored graph of appropriate camera number will be changed.

3 Indication of stored amount

: It indicates record type and storage amount by time.

	Violet	Recorded with continuous recording
	Blue	Recorded with motion recording
	Orange	Recorded with Sensor recording
	Green	Recorded with Pre Alarm, but there is no indication if nothing was recorded

4 Search Bar

: This function indicates current time line of data which is being searched.

▶ You can immediately search for any recorded data by horizontally moving search bar.

☞ **[Note]** Black screen will be displayed if there is no image for the camera you selected.

4

Playing Recording

Playback

: Select the date, time and camera number to playback.

▶ Adjust search speed and delay to display as you want.

Backward Play

Forward Play

Stop

Play one picture backward

Go to the first one hour of the retrieved image

Play one picture forward

Go to the last one hour of the retrieved image

Search Tools

Panorama

:Display selected camera's image consecutively in each divided screen.

Zoom

: Zoom in and out. Gives five times magnification.

Digital Zoom

: Each click on Digital Zoom button converts among zoom-in / zoom-out / drag.

▶ Zoom-in (+) : Right click on certain spot zoom in up to 13 grades.

▶ Zoom-out(-) : Right click on certain spot zoom out.

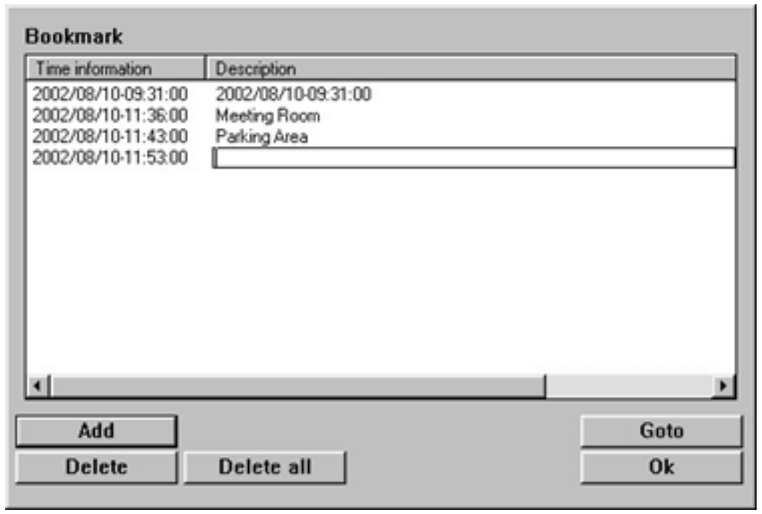
▶ Drag : Move the magnified image by dragging

☞ In the search mode zoom in or out is enabled only when one camera is selected.
(Zooming is not possible while playing multiple cameras' image. Therefore, click 'stop' and play One camera to zoom.)

Bookmark

: Records the location of image under playback

You can go back to the recorded location directly next time.



Time Information

: Display time of bookmarked image.

▶ When you add the image location during search the date and time will be saved in the order by date and time.

Description

: You can input description on the bookmarked image.

▶ If you do not input description the one in [time Information] will be input.

Add

: This is to add the image location to the bookmark list.

▶ [Add] If you click [Add] button, the current image location will be added to the bookmark.

Delete

: This is to delete the bookmarked location.

▶ In order to delete bookmarked record select it in the bookmark and click [Delete]

Delete all

: Delete all the bookmarked image location.

▶ All the image location will be deleted if you click [Delete all] button.

Goto

: You can go to bookmarked image location by clicking this button.

▶ Click [goto] button to go to the bookmarked location after selecting the bookmark.

OK

: Select [OK] button after adjusting bookmark information.

Recording during playback

: Image search speed will increase if DNE does not record while searching.

▶ In order to set it as recording during playback, click this button again.

(This will be disabled in monitoring mode.)

[Notice]

Though the image recording goes on while searching, however, recording graph does not change. You should go to live mode and come back to searching mode to see updated graph.

Screen Division

: Playback recorded image in division.

▶ 4ch, 9ch, 16ch can be selected and deactivated mode cannot be used.

Search Speed

: Playback skipping the certain number of image.

▶ The number is not the number of actual image, but the one set inside SPR Smart View program.

Display Delay

: Time to display one image on screen.

▶ 0 (Fastest) ~ 50 (Slowest)

5 Search Tool

Brightness

: Adjust brightness of the image.

Contrast

: Adjust contrast of the image.

Smooth & Sharpness

: Make the rough image smooth and vague image clear.

Noise Reduction

: Reduce noise in the image.

Turning image

: Turn the image in the angle of 90, 180 or 270. And flipping is possible.

Restoration

: Getting back to the original image before modification by search tools.

☞ **[Notice]**

Search tools an be used for one camera's image only. Therefore, you should click stop button and choose one image to use above tools.

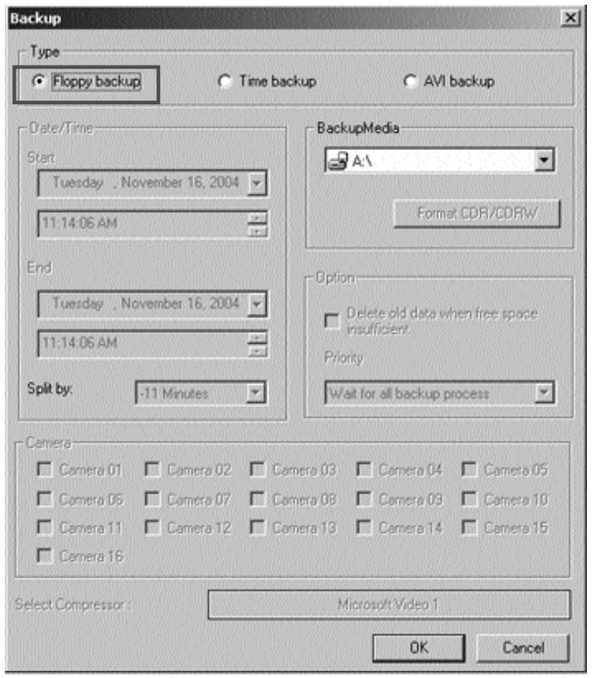
6

Data Backup

Backup

: This function enables stored data in the system to backup in floppy, time, and AVI mode.

Floppy Backup



Floppy Backup

: 'Backup' Window above appears when you click on Backup icon after selecting stored data.

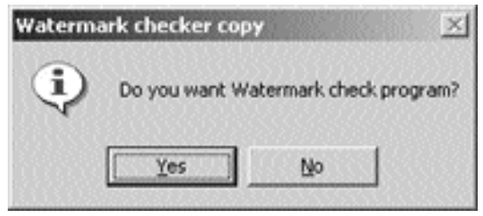
▶ This is used to backup image per page and the image will be stored in floppy diskette in BMP so you can view them from normal window.

▶ You can choose [Floppy backup] if you select backup button while searching for only one magnified image.

How to backup from floppy

① Select [Floppy backup] from "Backup" window and click [OK].

② 'Watermark checker copy' window will appear.



③ If you click 'Yes' then selected/zoomed-in image and ' Water mark check program' will automatically backup to a floppy diskette.

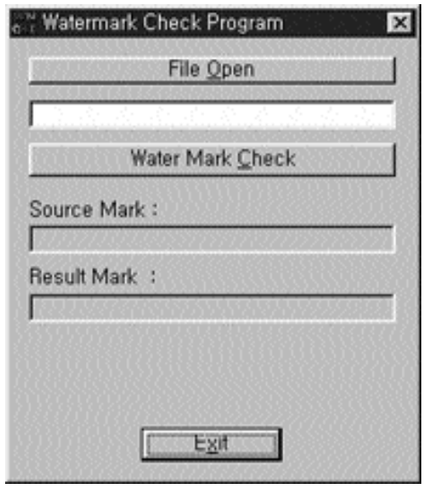
▶ But, when you backup into floppy diskette, it can only process page by page backup and for 'watermark check program, you only need to save it once.

☞ **[Note]**

Images stored in the floppy diskette are in BMP format. 'Water-mark program' will also be stored onto Floppy diskette for selected image to check for modification.

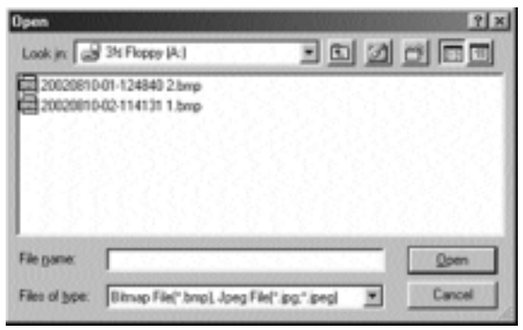
[How to Use Water-mark]

: Watermark indicates if any image was illegally modified in BMP format.

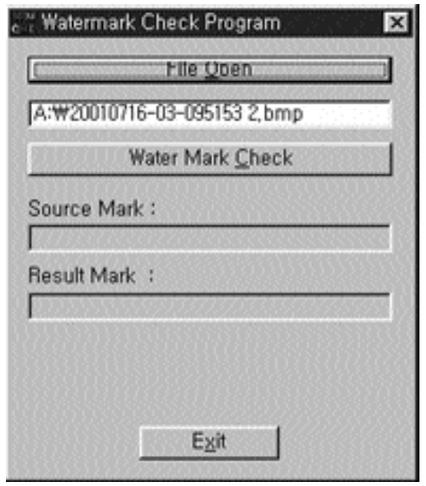


Watermark Check program

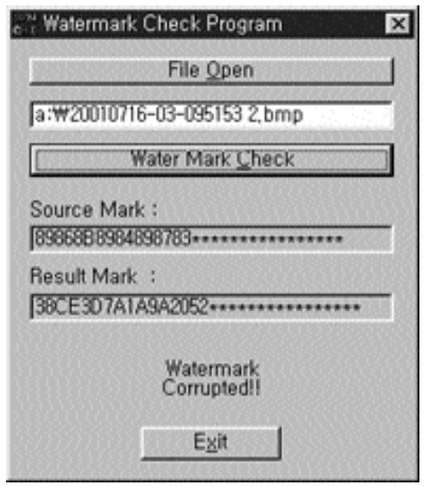
- If you execute 'WMChecker.exe' which is copied to the Floppy Disk with the backup image, following 'WaterMark' checking program will appear.
- If you click 'File Open' button, below widow will appear to check authentication of image.



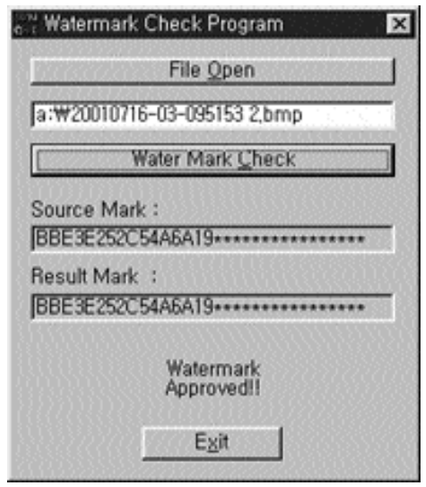
- After selecting backup image file and click 'open', file name appears as shown below.



- Once verification is completed, below windows will appear and give you the check result; either Corrupted or Approved.



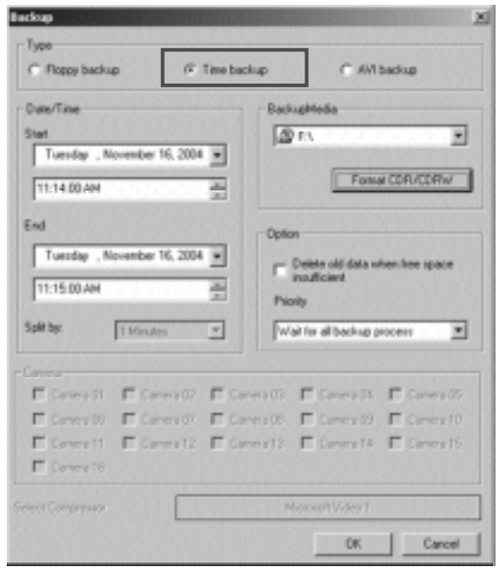
< If modified >



< If not modified >

Time backup (large media)

: This is a backup using other than floppy such as HDD, CD-RW, mobile driver, network driver or copy using IP address.



Backup by time

▶ This streaming data is our own data type. So this image can not be read using other program than SPR Smart Viewer program.

Date/Time

: Select start and end time of backup data.

▶ This time setup should be earlier than current time. If this is later current time backup does not work despite clicking [OK]

Split by

: When you perform the backup for the picture in the picture in the format of AVI moving picture, you should select the save unit of the file.

▶ In case of AVI backup, it is available to save the file by sorting the time unit as you want.

Backup media

: Media to use on backup.

▶ You may select HDD, CD-RW, removable drive, Network Drive, Remote IP Address except floppy disk.

▶ If [Backup Media] is not assigned, [OK] button will not activate anything.

Format CDR/CDRW

: This is used when you select CD to backup data.

▶ If CD is unformatted, use Direct CD program to format CD. When you select [Format CDR/CDRW], you will be able to format CDR/CDRW media through Direct CD.

> ☞ **[Note]**
> Direct CD program must be installed in window in order to format CD.

Option

[Delete old data if there is not enough space]

: This function will delete the oldest data and re-record new ones over it only if there is not enough space to store backup data.

[Select Priority]

: Assign priority of the data to be backup

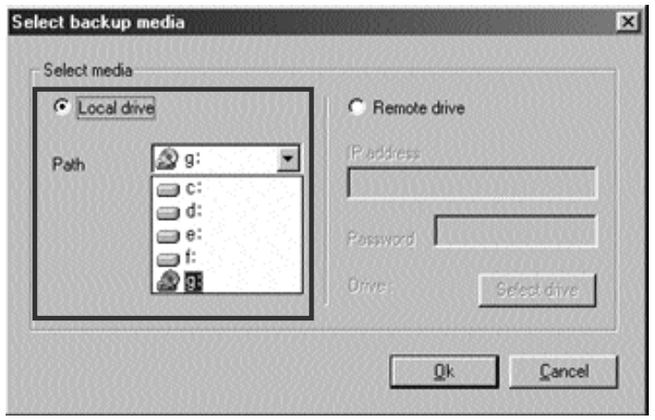
▶ Wait until current work is finished; start the backup after current data and waiting data have finished their backup.

▶ Start after current work is finished; if data have completed its current backup, then do not backup the waiting data if other data was selected prior to the waiting ones.

OK

: Backup will start from appropriate backup media drive when you click [OK].

[Backup onto CD-R / CD-RW]



CD-R/RW backup

① Select [Select media] from “backup media” window.

② From “Select backup media” window, select [OK] button after selecting CD-RW drive which you will backup.

▶ You need to format CD in order to backup CD-R/CD-RW.

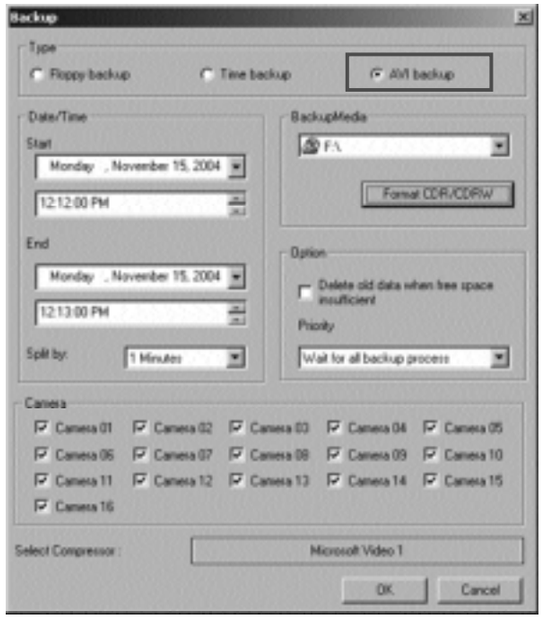
▶ If a CD is unformatted or failed to Backup, please follow this step to Format the CD (Refer to Appendix).

▶ In order to backup onto CD-R/CD-RW, Direct CD S/W should be installed in the system.

▶ If CD is formatted, do the same thing like you did to backup HDD, or removable drives (DVD-RAM, ZIP, MOD, RB).

AVI Backup

: This function converts to AVI form to backup from Window media player and real time player.



AVI backup

▶ Beside floppy drive, data backup is possible through HDD, CD-RW, removable drive, and network drive.

▶ You may backup by each camera in AVI form and image backup can take place for max. of 5 minutes.

Date/Time

▶ You may backup for maximum of 5 minutes while data is being backup in AVI form.

Camera

: Select camera number to backup in AVI format.

▶ You may select multiple cameras at once and they all can backup into AVI format by each camera at the same time.

Spit by

: When you perform he backup for the picture in the format of AVI moving picture, you should select the save unit of the file.

▶ In case of AVI backup, it is available to save the file by sorting the time unit as you want.

Select Compressor

: Codec compression can be chosen when you backup in AVI form.

☞ **[Note]**

- Direct CD program must be installed in Windows in order to format CD.
- You can store AVI file with smaller size and reduce backup time if codec compression is installed other than Mpeg codec compression which is provided by windows.
- AVI backup time will change remarkably according to type of codec compression, number of selected camera, and backup time (If basic codec provided by window is used, it may take a long time to backup and Mpeg4 Video Codec v2 or more is recommended).
- Audio data will not backup if the backup is in process with AVI file but it will backup its image through AVI file.
- According to resolution of recorded data, resolution of AVI file to be backup will be as follow.

SPR Smart Viewer Resolution	AVI File (NTSC / PAL)
640x480(768x576) 320x240(384x288)	320x240
160x120(192x144)	160x120

Select Media

: Select a media to store backup data

▶ You may select HDD, CD-RW, Removable drive, Network Drive, Remote IP Address except floppy disk.

Format CDR/CDRW

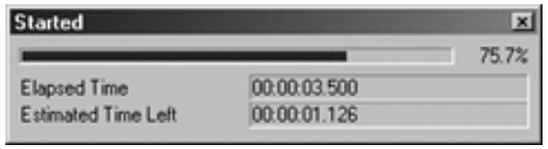
: This is used when CD is selected to backup data.

▶ If the CD is not formatted, use Direct CD program to format it. When you select [Format CDR/CDRW], you can format CDR/CDRW media by Direct CD (Refer to Appendix).

☞ **[Note]**

Direct CD program must be installed in window in order to format CD.

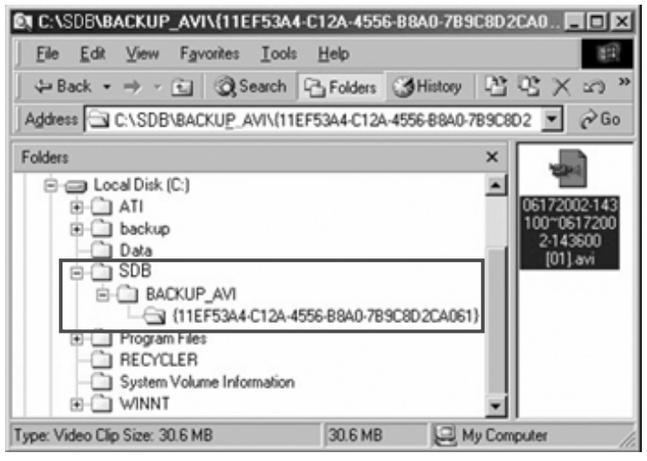
[AVI Backup Status]



Started

: When you double click on animated icon located on top of image while real time is in progress, current backup data and backup status and its progress rate, lapsed time, and remained time can be checked.

[AVI Real Time Backup File]



Choose AVI Real Time backup file

: In order to check AVI Real time backup file, double click on recorded file from assigned drive "SDB\BACKUP_AVI\ {xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxxxxxx}₩₩month day year-time min second ~month day year-time min second[camera No].avi" then you can check appropriate file information using

Window Media Player which is separately provided by real time player or window.

AVI Real Time Backup File and Caption information

: Using media player provided from Window, caption information of Date and time, days, camera number and etc can be indicated. Other real time player shows image only.

☞ **[Note]**

We recommend minimum of v6.4 for Media Player and if caption information cannot be checked, then choose 'Caption' from [View] to check such information.

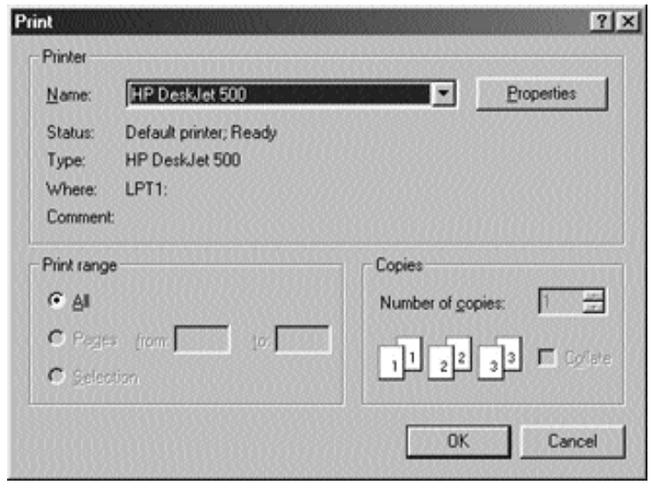
7 Print Search Screen

Print

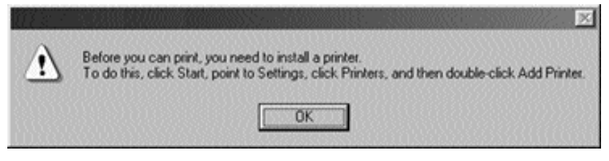
: Print searched image

▶ You can only print when no more than one image is open while searching.

Click on [OK] button to print (Adjust size and brightness before print).



If printer is not setup, then following error message will appear.


Before you can print, you need to install a printer.
To do this, click Start, point to Settings, click Printers, and then double-click Add Printer.
OK

☞ **[Note]**

Printer Setup

1. Click Start → setup →printer from Windows
2. Double click on Add Printer from Print Menu
3. Click [Next] when Add Pinter Wizard executes.
4. If printer is connected, check and see if [Local Printer] is selected and click [NEXT].
5. Select Print Driver from the box where it asks manufacturer, name, and model of printer.
6. Print setup will end when driver is installed.

Size of image output

Size of a image output is equivalent to magnified image seen from monitor.

If printer is not working,

1. Check to see if the printer is setup
2. If the printer is setup in window but failed to print, then check printer cable or power code and see if they are appropriately connected.

8

PAN/TILT Mode

Description

❶ Indicate current date and time
❷ PAN/TILT : Adjust camera's direction from up & down, Left & right, and diagonal.
❸ FOCUS : Focus the Camera Lens.
(This is not necessary is you are using AUTO FOCUS Lens.)
❹ ZOOM : Adjust Camera Lens, Zoom In/Zoom out.
❺ Auto PAN : Camera Function for Auto PAN, On/Off
❻ LIGHT : Camera light On/Off
❼ WIPER : Activate Camera's Wiper
❽ POWER : Power, On/Off
❾ Convert to Search Mode : It converts to Search Mode from PAN/TILT.

☞ Auto PAN, LIGHT, WIPER, and POWER button may vary depend on type of RX Receiver (Different manufacturers support different Receiver)

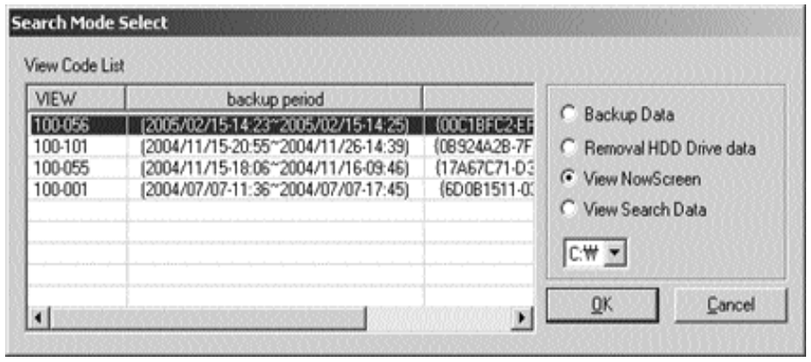
9

Search Backup Data

Insert backup diskette to search backup data without connection being made.

☞ **Tip**

Data supports following for backup : HDD, removable drive which can be recognized from windows (DVD-RAM, ZIP, MOD etc), CD-RW, and Network drive.



Description

VIEW Code List

: VIEW Code and Key value will appear on backup data

▶ If several data are stored in backup media, then you may distinguish them using VIEW code.

▶ If there are several VIEW Code, click on appropriate VIEW code when search.

Backup Data

: Using Backup function from SPR Smart View program, it is used to search for recorded data from backup media on CD-RW,DVD-RAM, ZIP, MOD, and USB HDD.

▶ You may search for recorded backup data on Remote's certain drive through remote drive backup or through network drive,

▶ (But, when you backup from Remote's certain drive from DNE where connection is made to Network drive, you must share entire Viewer's drive.

Removal HDD Drive Data

: This is used to search for backup data using removable hard disk.
(It is possible to search data recorded under "one time Record" in SPR Smart View.
Also possible to playback from the HDD by using SPR Smart Viewer.)

View NowScreen

: When you display current image after connection is made to DNE, it searches for recorded data from Remote.

View Search Data

: When you search for recorded data from View after connection is made to DNE, it searches for recorded data from Remote.

Select Backup Drive

: Select drive languages like CD-RW, DVD-RAM, ZIP, USD HDD, MOD etc into hard disk from where its backup data is stored.

▶ Drive languages support every drive which can be recognized from windows except floppy drive.

OK

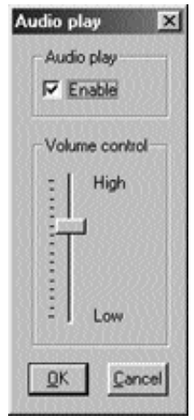
: It will convert to search screen and search selected backup data when you click [Ok].

☞ **[Tip] Search backup data**

If you have finished choosing Site Code and Drive language for backup media, click "OK" and do your search like you did to connect to DNE.

10 Audio Replay

"Audio play" window appears from search mode when you click on Audio Replay button.



Audio Replay

: This function produces audio output if you wish to search for current and searched images stored in backup data or Remote.

▶ Check on "Enable" on 'Audio Play' item.

▶ Adjust the volume properly using 'Volume control'.

[Tips]

- Audio can be played only on one selected channel. You cannot play audio choosing more than one channel. In other words, You should choose one channel to play audio.
- Video loss can take place within the first 1~3 seconds of play back, this is due to the video and audio synchronization and is not a fault.
- Audio can only be played back in normal forward play. Reverse Play or Frame Play is not possible.
- Skip and delay cannot be used with audio play back
- After it is connected to DNE, nothing will supoort Audio replay function but audio replay is possible when it is to be searched for stored data from Remote.

11 2 Way Audio

This function enables voice conversation from both direction when you connect form the SPR Smart Viewer to DNE.

Connecting 2Way Audio

① Select this button to connect to 2Way Audio after connection is made to DNE.

▶ If you choose 2Way Audio while transmitting current image, it might temporally delay image transmission to initialize sound card but this is not a fault.

② 2Way Audio Communication

: Once 2 way audio program is executed, you can hear a voice through speaker simultaneously and you can also transmit voice to the site using microphone as well.

▶ When 2Way Audio is connected from SPR Smart Viewer while recording audio from DNE, audio recording will be discontinued from the DNE while 2Way audio is connected. But if 2Way audio connection gets cancelled then DNE's audio recording will execute again.

▶ If several Remotes are connected to DNE, it may connect to 2Way audio that was connected initially. When connecting to several DNEs from Remote then the most active DNE may connect to 2Way audio.

③ Minimize and End 2Way audio connection

▶ When you select [X (close)] from window's upper right hand corner, you can end 2Way audio function.

▶ When you select [- (minimize)] from window's upper right hand corner, you can minimize 2 Way audio window.

[Tips]

- When communication is made using modem (PSTN) or slow exclusive circuit, sound of 2 Way audio may break little by little.
- Separate setup is required in order to communicate through 2 Way Audio. (Refer to Appendix)

Remote View (DNE) Setup

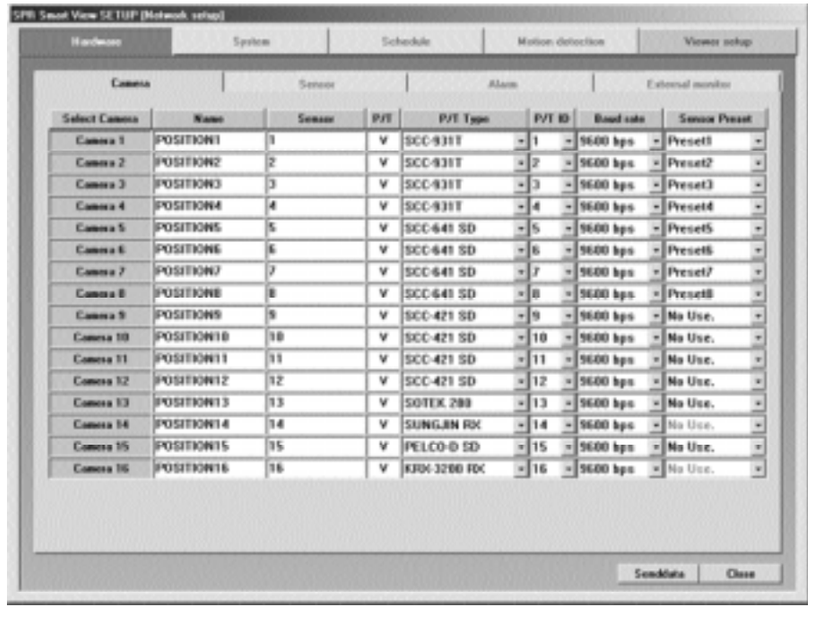
1 Hardware

Sets the environment of the connected SPR Smart View System

① Click on setup system to set the system.

② For a security reason, the user will be asked to type in the password. If no password has not been set, simply click on “OK”.

Hardware [Camera]


SPR Smart View SETUP [Network setup]
Hardware
System
Schedule
Motion detection
Viewer setup
Camera
Sensor
Alarm
External monitor
Select Camera
Name
Sensor
P/T
P/T Type
P/T ID
Baud rate
Sensor Preset
Camera 1 POSITION1 1 V SCC-931T 1 9600 bps Preset1
Camera 2 POSITION2 2 V SCC-931T 2 9600 bps Preset2
Camera 3 POSITION3 3 V SCC-931T 3 9600 bps Preset3
Camera 4 POSITION4 4 V SCC-931T 4 9600 bps Preset4
Camera 5 POSITION5 5 V SCC-641 SD 5 9600 bps Preset5
Camera 6 POSITION6 6 V SCC-641 SD 6 9600 bps Preset6
Camera 7 POSITION7 7 V SCC-641 SD 7 9600 bps Preset7
Camera 8 POSITION8 8 V SCC-641 SD 8 9600 bps Preset8
Camera 9 POSITION9 9 V SCC-421 SD 9 9600 bps No Use.
Camera 10 POSITION10 10 V SCC-421 SD 10 9600 bps No Use.
Camera 11 POSITION11 11 V SCC-421 SD 11 9600 bps No Use.
Camera 12 POSITION12 12 V SCC-421 SD 12 9600 bps No Use.
Camera 13 POSITION13 13 V SOTEK 280 13 9600 bps No Use.
Camera 14 POSITION14 14 V SUNGJIN RX 14 9600 bps No Use.
Camera 15 POSITION15 15 V PELCO-D SD 15 9600 bps No Use.
Camera 16 POSITION16 16 V KJDI-3280 RX 16 9600 bps No Use.
Senddata
Close

Description

- **Select Camera :** To decided which camera to use
  - ▶ When Camera Button is pressed: Camera in use
  - ▶ When Camera Button is not pressed: Camera not in use

  ☞ camera not in use' is selected, it may lower the recording speed, so it is important to select camera which you will use only.
- **Name**

  : Input the name of place which the camera will be installed
- **Sensor**

  : Input the sensor number which will be used with each camera
  - ▶ 1 up to 16 external sensors can be connected and if the external sensor activates then linked camera will record the image.
  - ▶ Input additional comma(,) in case several external sensors are to be linked together.

    For example) When operating external sensors number 2 and 3 and you wish to record the image of number 1 camera, then input "2, 3" on Camera "Sensor" Category.
- **P/T**

  : Check if the selected camera is PTZ.

  In this case, PTZ related equipment should be connected and selected camera will indicate PAN/TILT on top of image.
- **P/T Type**

  : Model of RX-Receiver and Speed Dome Camera which are compatible with system and RX-Receiver's Control protocol are inputted. Select the model compatible with current model.
- **P/T ID**

  : Select ID from P/T connected to the system.
- **Baud Rate**

  : Baud rate might be different depending on the type of PAN/TILT camera.

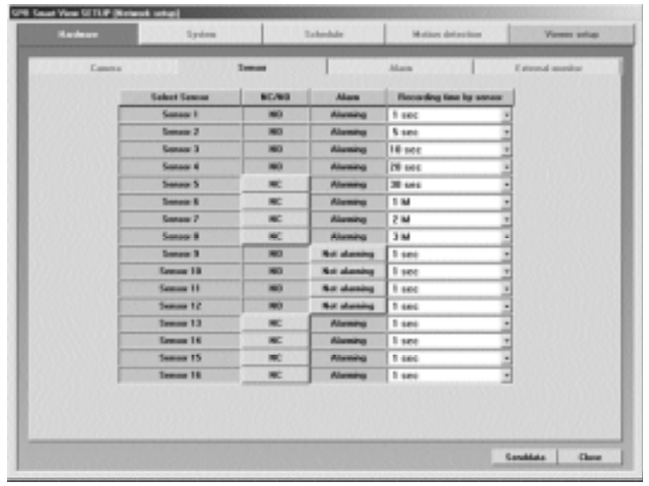
  Currently 4800BPS, 9600BPS, 19200BPS and 38400BPS are supported.

- **Sensor Preset**

  : When data is inputted into a sensor interworking with the corresponding camera, Sensor Preset Interworking feature will move the image preset in Pan/Tilt mode.

  ☞ For more information about presetting the position for Pan/Tilt mode, see "Presetting" in "Pan/Tlit Mode" part.

Hardware [Sensor] screen



Description

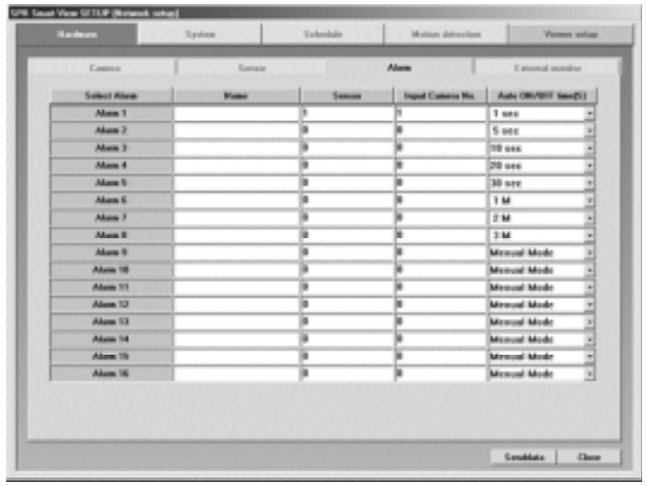
- **Select Sensor** : Number of installed external sensor and terminal input must be equal.
- **NC/NO** : Type of sensor should be selected

  Each click will change to either [NC]<-> [NO] (NC is set to default.)
  - ▶ NC (Normal Close Type Sensor) : Select this if sensor's point of contact is a close type
  - ▶ NO (Normal Open Type Sensor) : Select this if sensor's point of contact is an open type
- **Beep Sound**

  : Beep sound will occur if any signal is detected within selected time. Speaker that is located inside the system will let you know site's situation by the sound.
  - ▶ Beep sound occurs only when the sensor signals within setup time.
  - ▶ If recording schedule number is set to 'continuous record' then beep sound will not operate.
- **Recording time by sensor**

  : When there is a signal from sensor connected to system, this function is to setup time which will record camera's image linked with sensor. (Possible to setup 1sec, 5sec, 10sec, 20sec, 30sec, 1Min, 2Min, 3Min, or Manual mode. Factory value is set to 1 sec)

Hardware [Alarm] screen



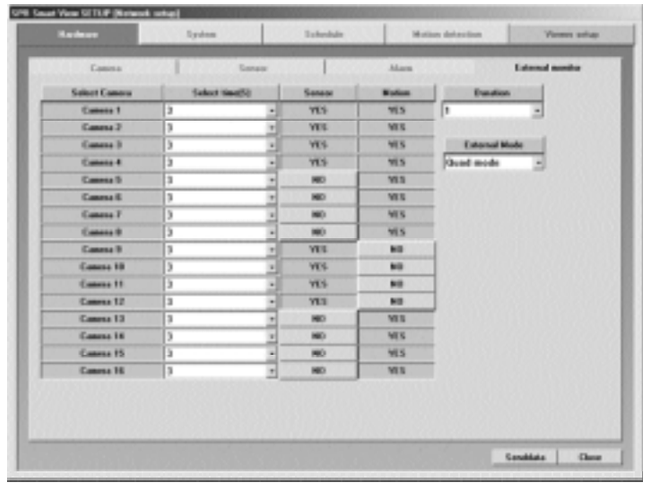
Description

- **Select Alarm** : This button is to setup alarm's terminal output.
  - ▶ When button is pressed: Linked alarm is selected
  - ▶ When button is not pressed: Linked alarm is not selected
- **Alarm Name** : Enter the name of Alarm to be used.
- **Linked Sensor** : In order to auto-operate alarm through external sensor, enter external sensor's number that is linked to external sensor.

  Example) If you want to operate number 1 alarm when number 3 sensor operates, select Alarm 1 and enter "3" for sensor category.
- **Input Camera No.** : In order to activate external alarm by motion detection input the camera number that will detect the movement.

  Ex1.) If you want to activate alarm 1 on detecting movement on camera2 , select Alarm1 and input camera number "2"
- **Auto ON/OFF time(S)** : Input continuance of operating time for control output in second after sensor signaled. (Possible to setup 1sec, 5sec, 10sec, 20sec, 30sec, 1min, 2min, 3min or manual mode. Factory value is Manual mode.)

Hardware [External Monitor] Screen



Function

External monitor produces image (shown from DNE monitor) output from normal TV or with normal analog monitor.

Description

- **Select Camera**

  : Select the camera to display on external monitor.

  It will auto-convert and produce output according to setup time
  - ▶ When button is pressed: Linked camera is selected
  - ▶ When button is not pressed: Linked camera is not selected

- **Select time(S)**

  : The output from external monitor should be assigned in second (From 1 sec to 10 sec)

  Each camera's image will be displayed by rotation for the designated time (sec).

Sensor

: The image will be displayed onto external monitor when the linked sensor detect signal.

Motion

: The image will be displayed onto external monitor when the camera detects movement.

Duration

: Setup the duration to display onto external monitor when linked sensor or linked motion detect signal or movement.

(1 sec ~ 10 sec is available, factory value is 2 seconds.)

External Monitor

: Select the image display mothed to be transmitted to an external monitor.

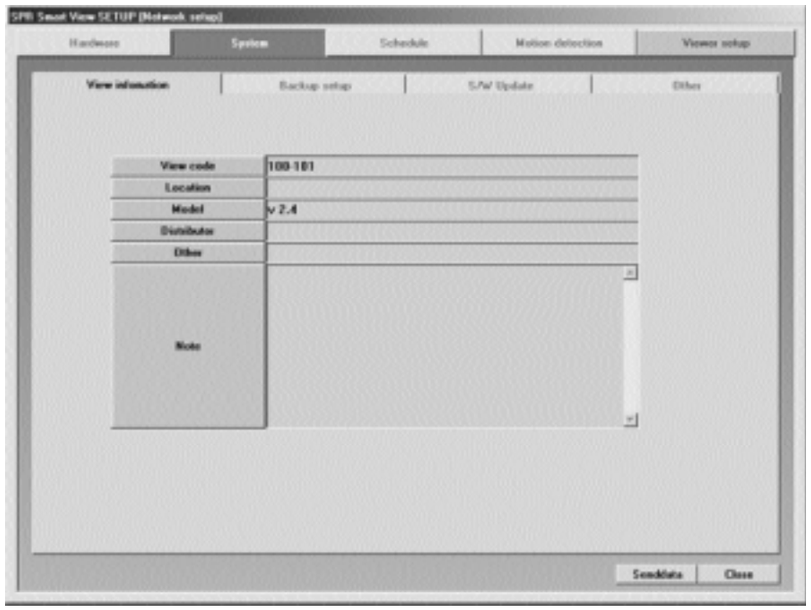
▶ Quad mode : Display the image to be transmitted monitor as the split images.

▶ Automatic Selection : Display the selected camera sequentially on an external monitor during the time setting.

2

System

System [View infomation] screen



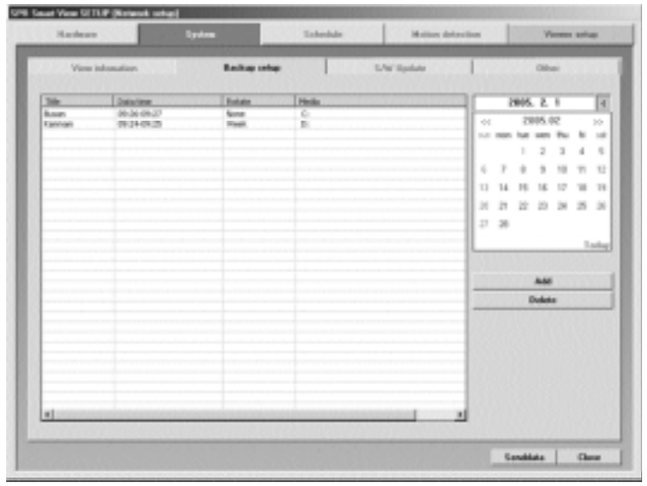
Description

View infomation

: Following will be checked: View Code, place, version, system maintenance, other, and A/S of system.

☞ Both Site Code and Password will be checked when connection is made from SPR Smart Viewer to DNE and if they are not correct then connection will fail.

System [Backup Setup]



Description

Backup Schedule setup

- It shows backup data's assigned time and period along with reserved list of backup media where data is stored.
- Backup will be in process according to backup schedule and its setup time.

Calendar

- Calendar will appear when you click on [<] button from the combo box where date is indicated.
- You can check backup schedule list and current date from backup schedule list will be displayed when you click on "Today".

Add

: This function adds recording time of backup data, rotation time, and backup media to backup schedule list.

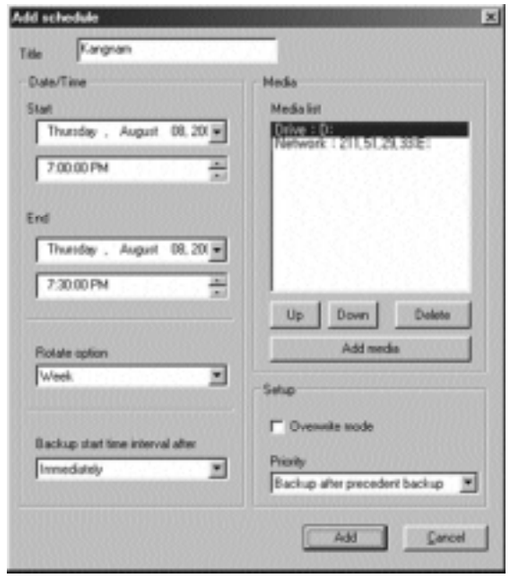
Delete

: Deletes schedule item from backup schedule setup list.

Data Transmission

: Any registered information from backup schedule setup list will not be stored if [Senddata] is not selected.

Method to add backup schedule



Title

: Input name to be add on backup schedule list.

Date/Time

: Selects start and end time for backup data

- ▶ It must be setup after current recording time.
- ▶ If it was setup before current recording time, then it will be ignored and won't be added to the list when [Add] button is clicked.

Rotate option

: Repetitive rotation cycle can be maintained by assigning assigned date and Year/Month/Week/None basis for backup data.

- ▶ If [None] is selected, only one day setup can be made for assigned date/time.

Backup start time interval after

: After backup data has finish its recording, it assigns when the backup will start after data has finished its backup.

- ▶ Possible select time will be from 1 to 4 hours.

Media list

: Choose backup data to record backup media.

▶ It can be added up to 8 from media list and if fail to record on initially setup media, it will automatically back up to next media.

▶ Selection should be made as following: HDD, CD-RW, removable drive, Network drive except floppy disk, etc. It supports almost every language oriented logical/physical media.
You can select remote drive using IP address.

Up/Down/Delete

: Priority of backup media can be move from down/Up, and it can delete media that's already setup.

Add media

: Backup data can add media which will be recorded.

▶ Backup media can be added maximum of 8

Setup

① Overwrite mode : This function will record data after deleting old data when there is not enough space available to backup the data

② Priority : Assign priority of backup data

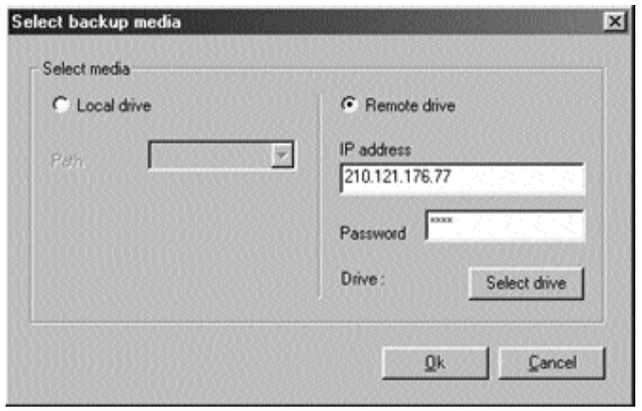
▶ Backup after precedent backup : Wait until the current work is done; start the backup after current backup and waiting data have finished their backup.

▶ Backup after current backup : Start after current work is done; when current data's backup is completed, do not backup the waiting data if the other data was selected first.

Add

: Add designated backup to backup schedule list.

Method to choose backup media



Local Drive

▶ You may choose HDD or removable drive (MOD, DVD-RAM, ZIP, USB HDD etc), CD-RW, Network drive.

▶ Among the systems that are physically and logically installed, all of write-recordable media can be supported.

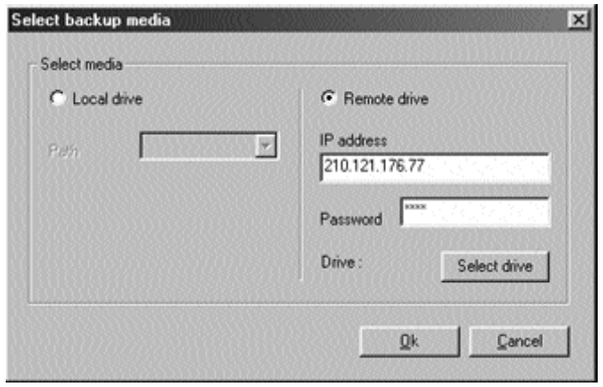
Remote Drive

: Using IP address, select this option where Viewer S/W is installed in remote area when backup.

▶ In order to backup in the remote area using IP address, Viewer S/W need to be installed to remote PC or File server. When installing Viewer S/W, remote Backup Server program, which was provided when the installation of Viewer S/W, should been executed.

▶ In order to do the remote backup setup, remote PC or File Server's IP location and password are required while Remote Backup Server program is being executed.

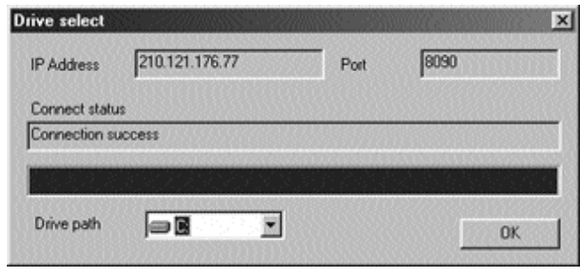
Remote Drive



Remote Drive

: Input IP address and password and select [Select drive].

▶ In order to connect to Remote Backup Server for remote backup, remote View's IP address and registered password from Remote Backup Server program is needed.

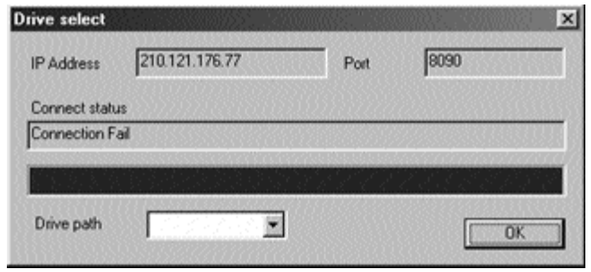


Path

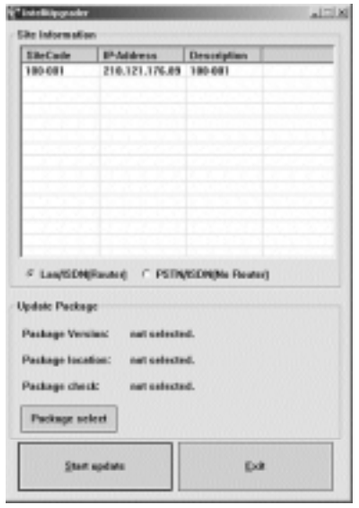
: If connection is completed successfully using selected IP address and password, you may choose an appropriate backup media drive from remote PC or File server.

Connection Failed

: If selected IP address and password are different or Remote Backup Server program has not been executed from remote PC or File Server, then connection will fail and you may not be able to choose backup media drive.



System [S/W Update]



Function

When you select [S/W Update], then Intelli Upgrade window will appear to select new program package and it can upgrade to a new program version stored in shared network folder.

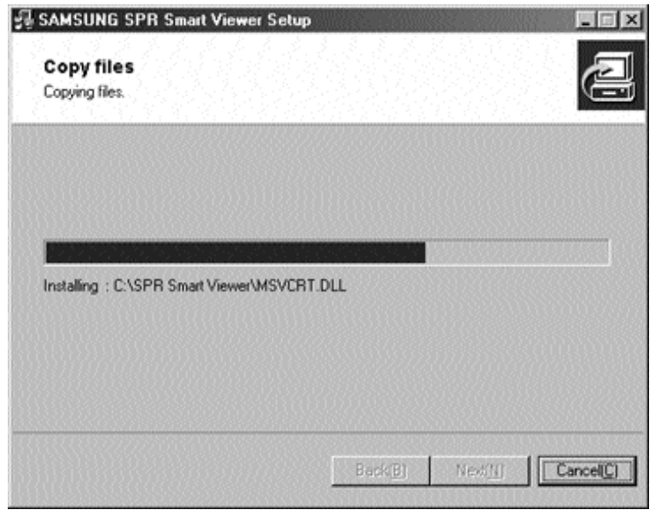
Description

Select Package directory

- ▶ Select [Ok] after selecting new package version folder stored in Hard disk or its network folder.
- ▶ Assigned folder must have package folder (Data1, Data2, Data3, Data-a, Data-b etc) or all files in package folder must be put together in one folder).

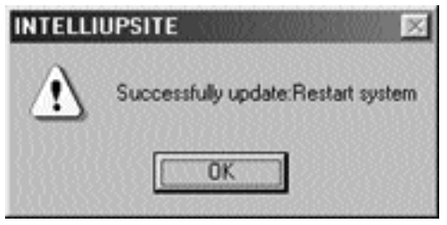
☞ When upgrading to a new version using Intelli Update, upgrading does not support floppy diskette. Therefore, we recommend you to upgrade after copying the whole media on hard disk or diskette that can hold large volume.

☞ If there is no file or package folder in certain folder due to a wrong folder designation, or if the damage had occurred to the file, then it will not be considered as a normal package so the program will not upgrade normally.



Test integral package and install system

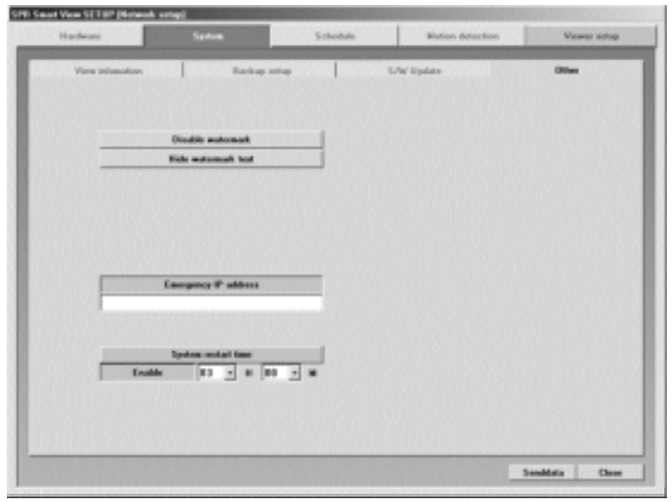
- ▶ Window above will appear to show installing process when you assign package folder.
- ▶ For purpose of testing integral testing for file package and to install program, you have to install it twice.



System Restart

: System must be restarted if a new program version had finished the upgrade.

System [Other]



Description

Watermark setup

▶ Using watermark

① This function inserts Watermark authentication mark on image to be recorded.

② When this function is selected, image will indicate WaterMark on the image.

▶ Displaying watermark text

① This function inserts Watermark authentication mark on image to be searched

② When this function is selected, image will indicate WaterMark on the image.

[Note] What is Watermark?

BMP images can be easily modified by 3rd party. To ensure the original is a true original that has not been modified, SAMSUNG provides special protection called ‘watermarking’, Authentication mark’, and ‘Watermark check program, which are encoded onto the image. Any changes to an original image, including just one pixel, will inform you that the image has been modified.

Emergency IP address

: Transmit emergency image of message by connecting to the assigned IP address.

▶ Click [Emergency IP address] button and input IP address.

System restart time

: This function is used to automatically reboot system per day.

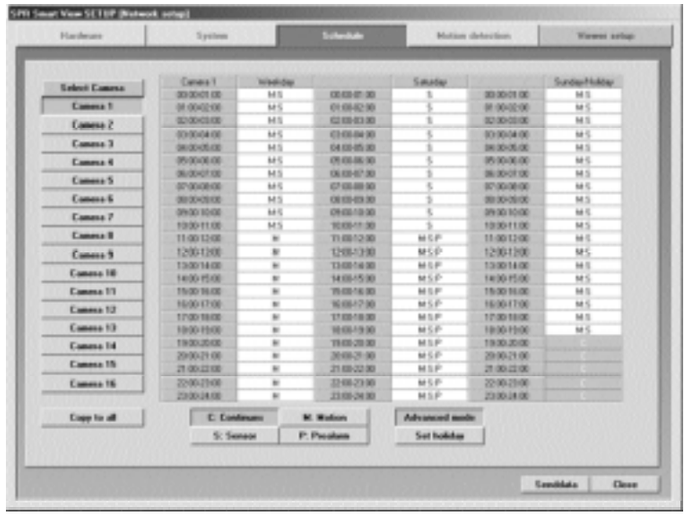
(This function sabilizes system operation.)

▶ Default is set to [Enable] so click on [Enable] if you do not want to use this function and it will convert to [Disable].

3

Recording Schedule

Schedule



Description

Select Camera

: Select camera number.

Copy All

: This function copies selected camera's information and paste into every camera.

Recording schedule type

: This function is to setup day and hour for selected camera.

▶ Select recording type (C/M/S/P) from Recording Mode by selecting time or dragging area.

▶ In order to setup covert hour to minute, double click on the time and it will show in minute.

←01min. 59min.→

Record mode (C/M/S/P)

: This function is to set recording type with day and time for selected camera.

▶ After choosing day and time from selected camera, selecting more than 1 record mode will change selected time within selected time.

▶ If you erase all the record type from [Record Mode], selected setup time will change to no record mode.

▶ Default is 'Motion & sensor record' of 24 hour continuous record.

Indication by record type	Supported record type
• C : Continuous record • M : Motion record • S : sensor record • P : free-alarm record	• no record • continuous record • motion record • sensor record • motion and sensor record • motion & free alarm record • sensor & free alarm record • motion &sensor & free alarm record

[Tip]

① Continuous Record

- This is used when continuous recording is done without using motion detection.

② Motion detection record

- This is used when recording is done using motion detection.

③ Sensor Record

- This function is to record by inputted sensor signal.
- Sensor setup can be done by camera and use time. If sensor is captured within selected time, related camera image will be recorded or related control will operate.
- Sensor input signal will be ignored if anything occurs outside the setup time.
- If related camera or time line is set to 'Continuous Record', then Sensor Record cannot be used.

④ Pre Alarm

- When a motion is captured on camera, then camera will record every moment of motion occurrence in addition to five seconds before the motion was detected. (But, recording speed may decrease if you setup several cameras with it).
- If the appropriate camera or time is set to 'Continuous Record' you cannot use Pre Alarm function.

Simple mode

: This function lets you to select by minutes instead of hours depend on recording mode.

▶ When [Simple mode] is selected it will convert to [Advanced mode]and gives more option to setup time. You can set different time for each time.

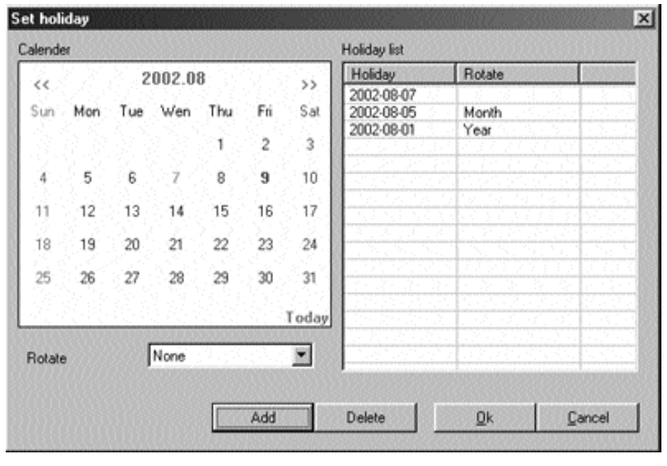
Set holiday

: You can pick any specific day of the year and set it as holiday

[Warning]

You must select [Save] button from [Schedule setup] in order to store information on any changed holiday.

Setup Holiday



Calendar

: Select any day to designate as holiday

▶ << : Move to prior month

▶ >> : Move to next month

▶ Today : Shows current Month/Day/Year

Rotate

: You may choose specific Month/Day/Year as holiday

▶ If you select [None], one day will be assigned and for that specific day only.

Holiday list

: This function is to show designated holiday and its repeated date or period in a list

▶ Any additional holidays will be stored in the list in an alphabetical order.

Add

: This function is to add holiday you have designated.

▶ Designated holiday will be added to [Holiday list] when you click [add].

Delete

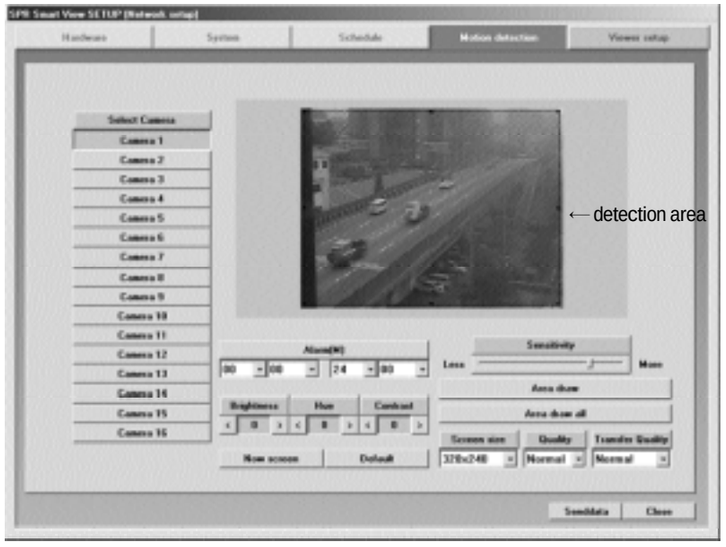
: This function is to delete stored holiday.

▶ In order to do this, select the date you wish to delete from [Holiday list] and click [delete].

4

Motion Detection

Motion detection screen



Description

Select Camera

: Select Camera.

Area of Detection

▶ To assign the detection area, place the mouse pointer over the desired area, drag it until your aiming area is fully covered. You can designate up to 5 different detection areas in each camera.

▶ To delete assigned area, drag out the area you wish to get rid of using left mouse button.

Sensitivity

: This function is to control sensitivity of movement every time any movement is captured on camera.

Default is set to “80” and it is our recommended value.

Select Area

▶ Selected area will be set as motion detection [Area draw].

Select All

▶ When you click on [Area draw all] then it will reset every area will be as motion detection area for all camera.

Beep Sound

: When a motion is captured from linked camera within selected time, speaker from inside the system will make BEEP sound to let you know site’s situation.

▶ When the button is pressed: Beep sound is enabled

▶ When the button is not pressed: It will disable beep sound

☞ It only detects the motion within setup time from recording schedule.

☞ If the linked camera is set to “Continuous Recording”, Beep sound will not operate.

Brightness / Color / Contrast

: Adjusts brightness, color, contrast

▶ Camera’s default value is set to ‘18 / 8 /10’ and you can adjust from -127 to 126 by each camera (Adjust camera to fit situation of site).

Initial Value

▶ It will convert to factory value when you click [Default].

Screen size

: Select Screen Size.

▶ Recommended resolution size is 320 x 240.

(For 160 x 120 resolution Display & Recording speed gets better double, for 640 x 480 display quality is good but recording speed will slow down.)

▶ Default value is 320 x 240 (based on NTSC).

▶ Supported resolution is as below :

NTSC : 160 x 120, 320 x 240, 640 x 480

PAL : 192 x 144, 384 x 288, 768 x 576

Compression Quality

: Choose screen quality.

▶ Screen quality improves as you set to higher value but file size per frame will increase.

▶ Default value is ‘Normal’.

☞ Recording screen size and compression quality has a close relation.

Transfer Quality

: Setup the quality of image to transfer when connection with DNE(SPR Smart View)

▶ Higher value gives higher image quality but file size?per frame will increase.

▶ Default value is set to “Normal”

☞ Image size and transfer quality is closely connected for the file size to be transferred.

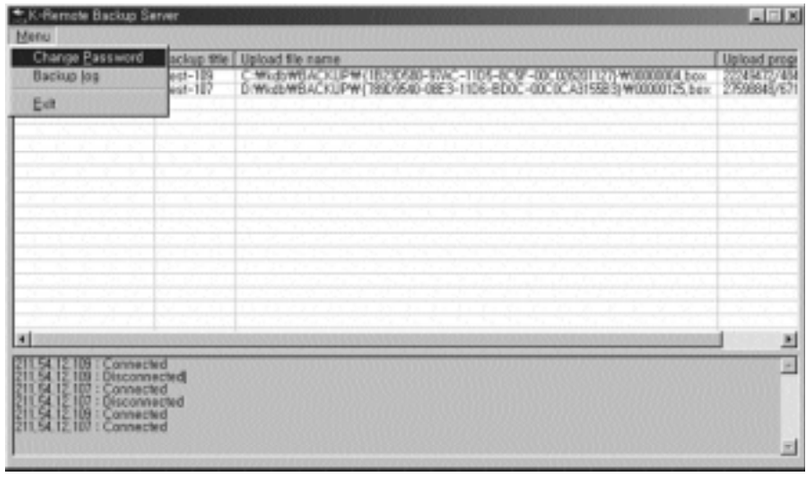
Ⅳ

Remote Backup Server

1 Remote Backup Server

- Using remote drive backup function from View, this function receives data while backup is in process, and executes automatically when Viewer program is executed.

Remote Backup Server Screen



Description

Menu

[Change Password]

: When backup from remote drive from View, you may change the password.

[Backup log]

: Using remote drive backup function from View, you can check for list of backup data and its information from remote backup server program.

Backup List

: Using remote drive backup function from DNE, current transmission of file size and file name, backup title, IP address of connected site, and site code will be shown in a list.

▶ Remote Backup Server program supports unlimited multi-connection and data transmission from connected DNE can backup simultaneously.

Connection List

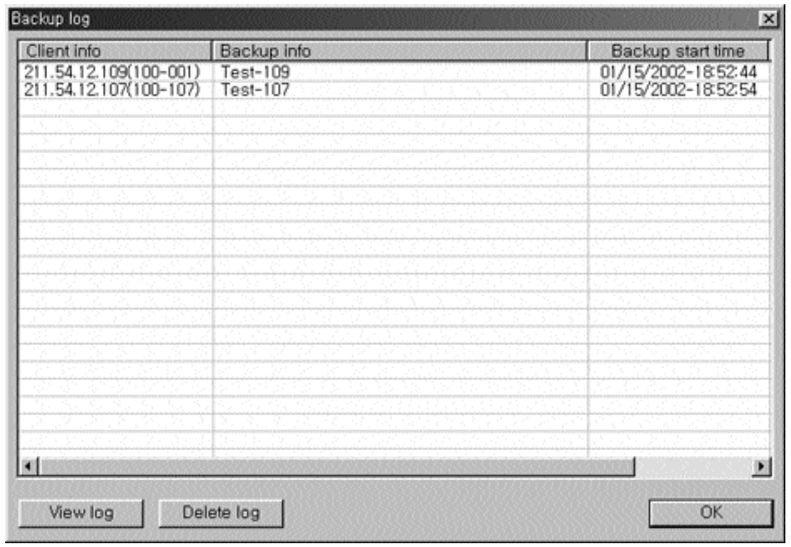
: This shows IP address and current connection status if connection got cancelled after connection was made.

Password Change

Change Password

: In order to backup data in remote drive from DNE, you can select remote drive after typing IP address and password where Remote Backup Server program is installed.
This function lets you change that password.

See Backup List (Backup Log)



Backup log

: This shows transmission's start time, IP address, and site code of remotely backup data in a list from View.

View log

: You can see a detailed information of (received) transmission data from selected DNE from [Backup Log].

You can also find information from appropriate list by double clicking on [Backup Log].

Delete log

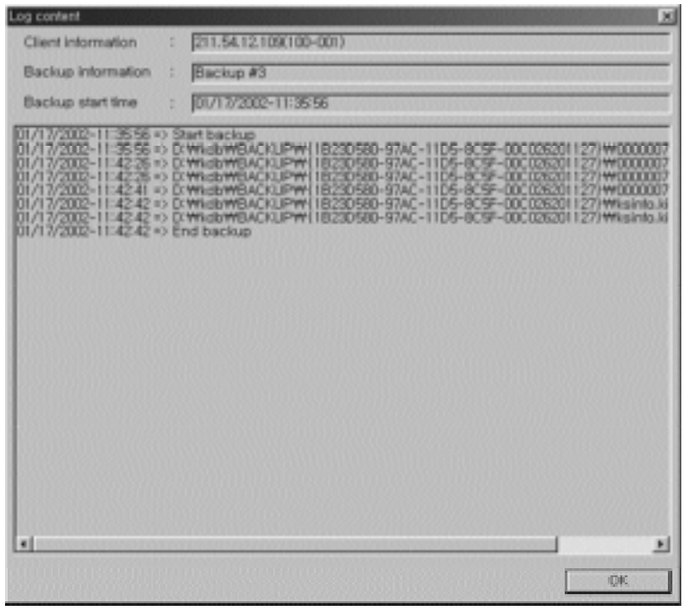
: This function is to delete received information which is registered in [Backup list].

In order to delete registered list, select the list you wish to delete from [Backup list] then select [Delete log].

OK

: End [Backup log] widow.

See List of information (View Log)



Client Information

: This shows remote backup data's IP address and View Code from View.

Backup Information

: When you setup remote backup, this shows the title for backup data.

Backup Start time

: This shows start time for transmission data, the data which was remotely backup from View.

File transmission

: You can see detailed status of file transmission of remote backup data from View.

Also, it shows transmission start and end time by each file and file name etc.

OK

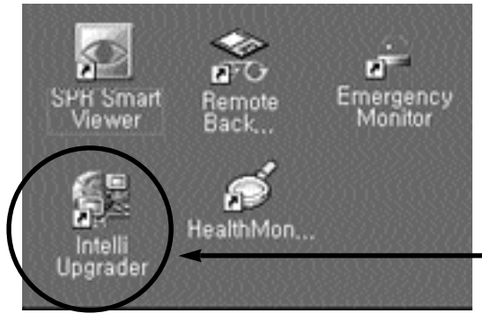
: End [Log content] Window.

V

Intelli Upgrader

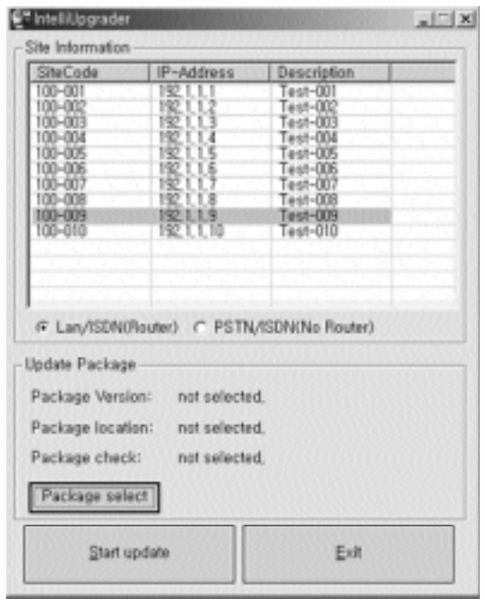
1 Intelli Upgrader

Using IP address registered in connection list of Viewer program, this function will upgrade SPR Smart View (remotely being executed from View) with a new version.



Execute Intelli Upgrader program which was provided when Viewer program was installed from desktop window.

Execute Intelli Upgrader



Description

Site Information

: It shows DNE information on DNE's IP address registered in SPR Smart Viewer Program, Site Code, and password etc. You can choose the site you want to upgrade for program.

> **[Tip]**
> Intelli Upgrader program does not support specific change or deletion, and input process from DNE..

Select Line Type

: Possible use of line types are LAN, PSTN,ISDN and exclusive. When using ISDN or exclusive line, communication can be made using router.

Update Package

: This shows program information on selected version of updated package program and a folderwhich contains original document, and result of integration test.

Package select

: Select a folder which contains original document of update package program.

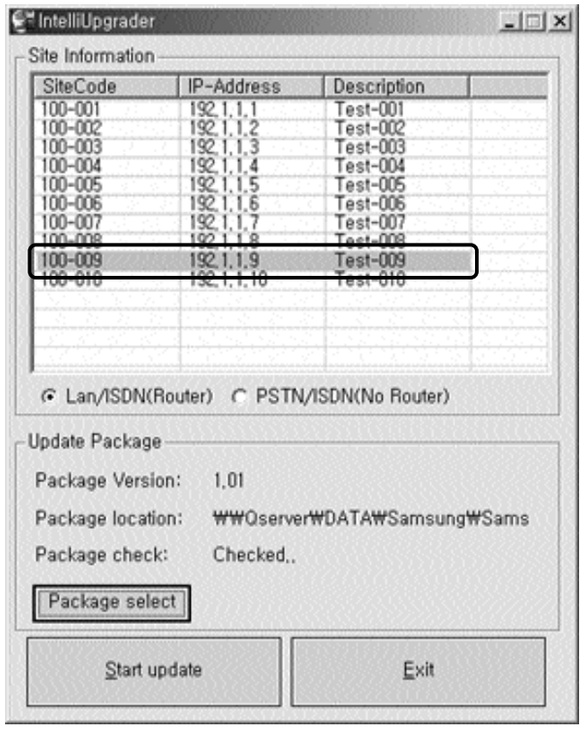
Start update

: Start upgrade the program using selected DNE information and update package program.

Exit

: End Intelli Upgrader program.

Remote Upgrade



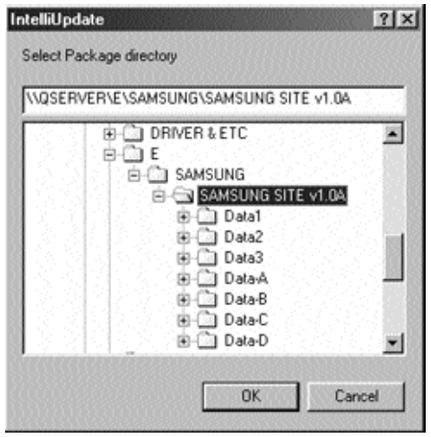
ⓛ Site Information

: Select a DNE where you will upgrade the program.

② Package select

: Select [OK] after selecting new package version folder stored in Hard disk or its network folder.

▶ Designated folder must have package folder (Data1, Data2, Data3, Data-a, Data-b etc.). Or all files in package folder must contained in one folder).



[Program folder: Select New package version program]

[Note]

When upgrading to a new version using Intelli Update, it will not support floppy diskette. Therefore, we commend you to upgrade after copying the whole media on hard diskette that can hold large volume.

If there is no file or package folder in certain folder due to your mistake, or if the damage had occur to the file, then it will not be considered as a normal package so the program will not be upgraded normally.

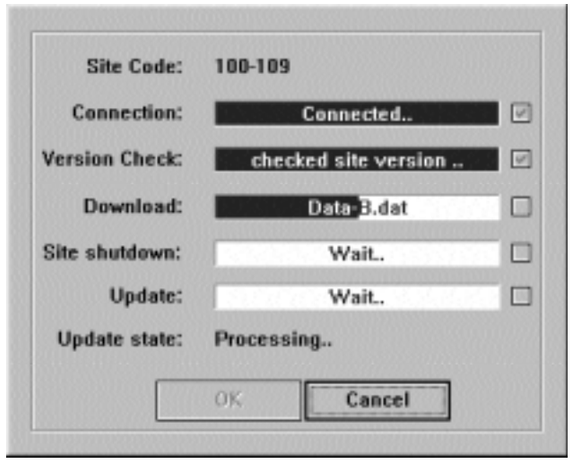
③ Start update

: Select DNE and package folder which you will upgrade and click [Start Update]. SPR Smart View program will start to upgrade from appropriate DNE.

④ Integral test for file package

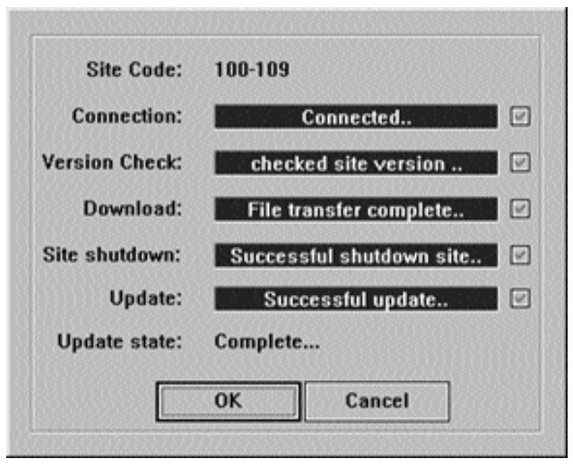
: When you assign package folder, it will show program installation status to do an integral testing for update package program, but program will not actually be installed.

⑤ Upgrade will start after selected update package program is transmitted to DNE when you select [Start update].



[Program transmission and upgrade status]

⑥ When you select [OK] button after upgrade is completed, system from DNE will restart automatically and SPR Smart View will execute again.



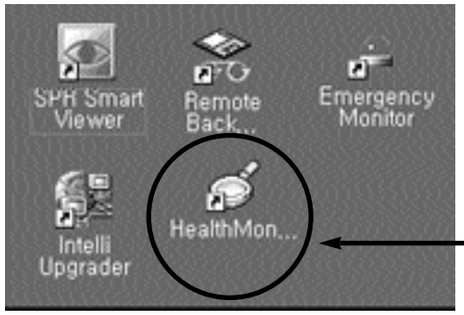
[Program transmission and upgrade are completed]

Ⅵ

Health Monitor

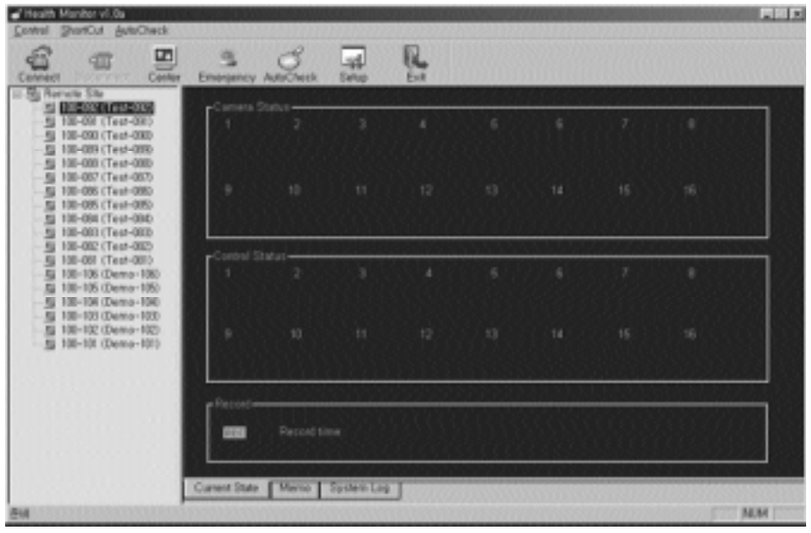
1 Health Monitor

Health Monitor program remotely monitors connection status for DNE, camera, control, and storage info.



Execute Health Monitor program which was provided when SPR smart Viewer program was installed from desktop window.

Execute Health Monitor



Description

Menu

: Menu is composed of [Control], [Short Cut], [Auto Check].

▶ Control Menu: [Connect], [Disconnect], and [Setup] etc.

▶ [Short Cut] Menu: Viewer program and Emergency Monitor program

Tool Bar

: To execute more easily, functions are made up of icons from Tool bar.

Connection list

: It sends site connection information registered in Viewer program along with View code and name of place and you can select View Site that you wish to make connection to.

▶ List will indicate site information that have already been inputted from LAN or PSTN according to “Type of connection”.

Status

: Window indicates storage status (normal/abnormal) of camera or control equipment.

▶ It will change to notepad system log file window according to menu function.

Tab Menu

: Composed of [Current State], [Memo], [System Log], and etc.

Status information from [Health Monitor] window will be changed according to menu in order to enable and check system information.

[Note]

Health Monitor program does not support unreasonable modification, deletion, or inputting process. It shows status of DNE which were entered from Viewer program.

2 Tool Bar

Connect

: Connect to DNE in order to check cameras from DNE, control, and storage status.
Select [Connect] after a DNE is selected to be connect from Remote Site List.

Disconnect

: Disconnect the DNE.

Execute Center / SPR Smart Viewer program

: This function immediately executes SPR Smart Viewer program without closing Health Monitor program. You can execute SPR Smart Viewer program when storage status of camera and control is abnormally indicated from Health Monitor.

Emergency

: Emergent message (image) received through motion detection or sensor signal from DNE can be checked from Emergency Monitor. You can execute immediately from Health Monitor program.

Auto Check

: Using DNE information in SPR Smart Viewer program, camera's connection, data storage, and operational status can be auto-executed. This is more efficient to use if there are many DNE information.

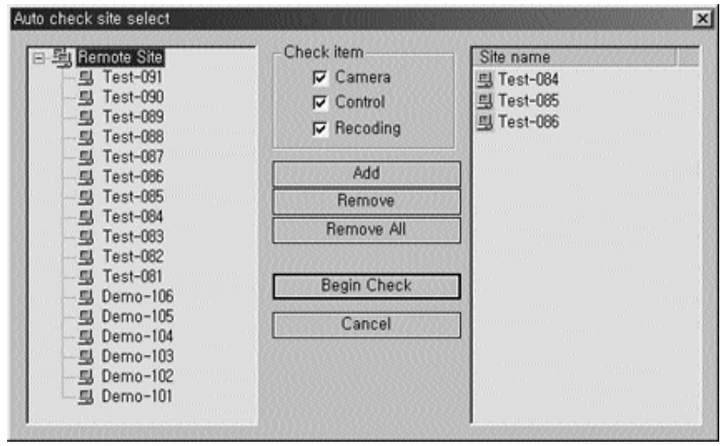
Setup

: This function is to setup Health Monitor program. You may set different time for different country. Also, SPR Smart Viewer and Health Monitor program can be executed simultaneously.

Exit

: End Health Monitor program.

Auto Check



Site selection

: Select a DNE to be auto-checked remotely from registered DNE information.

▶ Remote Auto-Check is possible when you select a group name like [Remote Site]. Auto-check (remote) is possible for every DNE.

Check item

: When a DNE is remotely being checked, select items to check.

▶ You can check for camera, control, and image storage status.

List of items to be auto-checked from Remote DNE

: Among DNE connection information registered In Connection list, indicate added DNEs to be auto-checked remotely.

▶ It is possible to register information either individually or as a group.

Add

: To be Auto-checked items selected from DNE can be added to Auto-check list.

Remove

: To delete DNE connection information registered in Auto-Check list.

Remove All

: To delete all of DNE connection information registered in Auto-Check list.

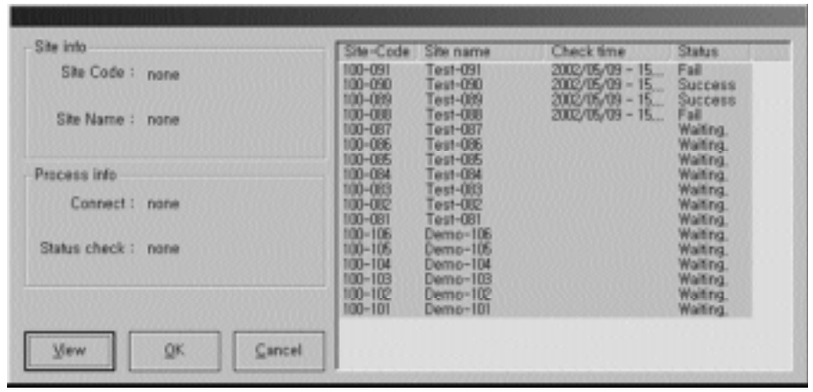
Begin Check

: Check Normal/abnormal state for camera, control, storage status from Check Item list.

Cancel

: Cancel information that is setup in Auto Check and end Auto Check window at the same time.

Auto Check - Begin Check



Site info

: It shows DNE's site code and name of place.

Process info

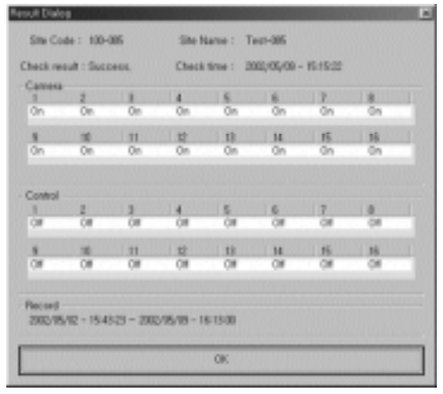
: It indicates connection status.

Indicate connection status

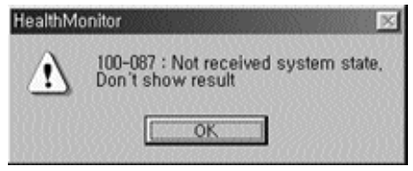
: It indicates connection and on-going status, and time of connection made for DNE.

View

: You can check for information of check-completed camera, control, and storage status among registered check list from DNE.



[Check Result using View button]



[Check Result of failed connection window]

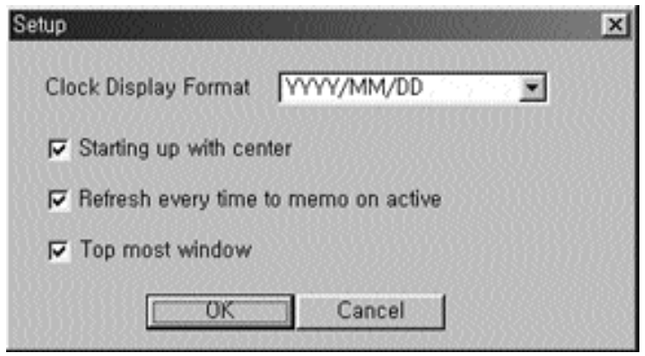
OK

: End Auto-check DNE window.

Cancel

: Stop Begin-check for DNE.

Setup



Clock Display Format

: In order to check Camera, Control, or storage status, select Clock Display Format.

Starting up with center

: When SPR Smart Viewer program is executed, this will be automatically executed at the same time.

Refresh every time to memo on active

: It will renew and show memo contents stored in the DNE every time [Memo] is selected from DNE.

▶ If Refresh every time to memo on active option is not selected, it will only read initial information of the memo when searching, and only that initial information will be indicated after that.

Top most window

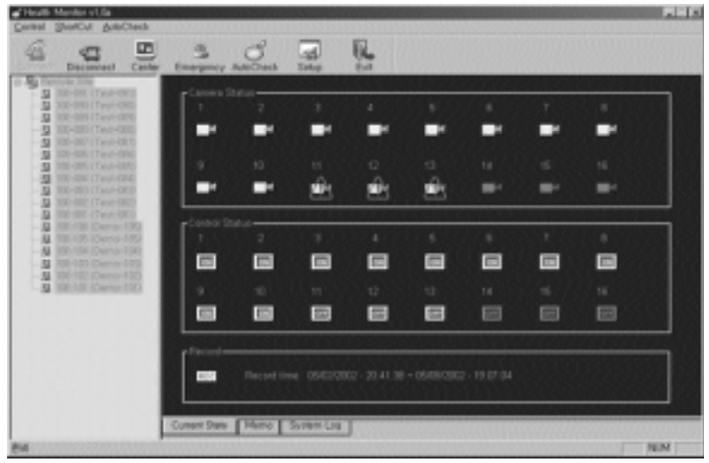
: Set Health Monitor program at Top most mode.

▶ 'Always on top' function for Health Monitor program.

3

Tab

Current State



Camera status

: Indicates number of camera and output status that are currently connected to DNE.

Icon will be indicated according to the condition of camera as following.

[Normal condition of camera]

[Camera is installed, but no image input]

[Camera is not installed]

Control status

: It indicates On/Off status of control equipment connected to DNE.

Icon will be indicated according to the condition of controller.

[Controller is operating (ON)]

[Controller is not operating (OFF)]

[Controlling equipment is not installed or not in use]

Record

: It indicates data's start and end time stored in DNE.

▶ Data will continuously be stored from DNE so data storing time will be renewed time to time.

▶ You many choose a date type from Setup menu

Memo

Memo list

: From DNE, Indicate memo's recorded time and title to current site.

Write

: This function is to input memo and its content will be stored at appropriate DNE when you click on [OK].

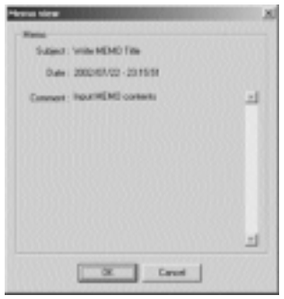
Delete

: Select the parts you wish to delete and select [Delete] to erase memo stored from DNE.

View

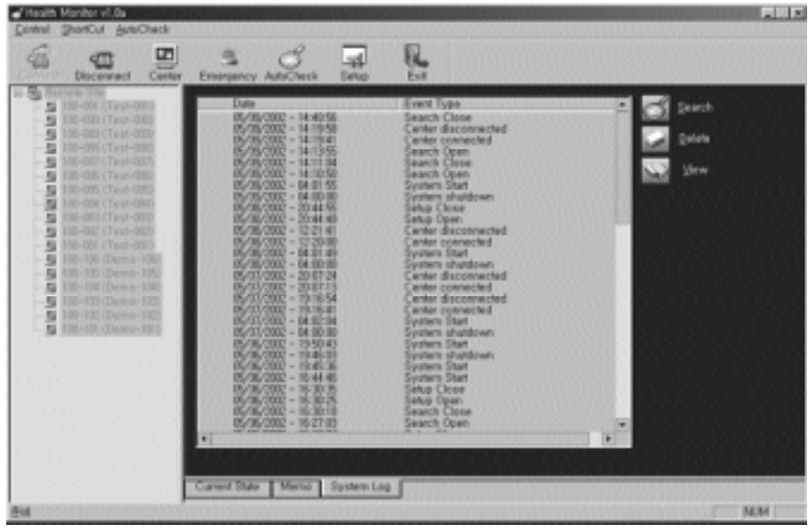
: Select the one you wish to check from memo list and click on [View] to check it from DNE.

[Input Memo screen]



[View - Indicate memo contents]

System Log



System log list

: It indicates system log (record) and log type which are stored in DNE.

▶ Type of information for system log will be prepared by DNE's start and end time, connection to SPR Smart Viewer, setup and execution, and search screen.

Search

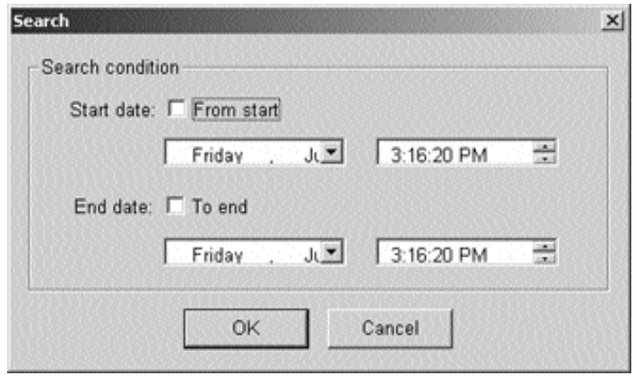
: This function is to search system log file stored in DNE and part of or whole system log file can be searched for specific time.

Delete

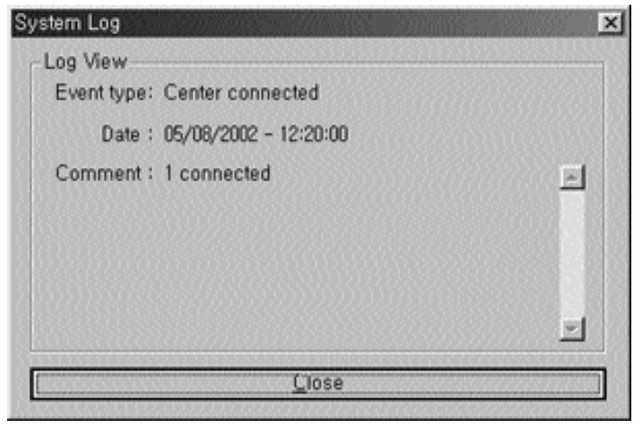
: This function is to delete system log file from the connected DNE. System log file will be deleted when you click on [delete] after selection is made for the parts to be deleted.

View

: You can check system's log file stored in DNE when you click on [View] from system's log list where files are already selected to be checked.



[Search - Search log file]



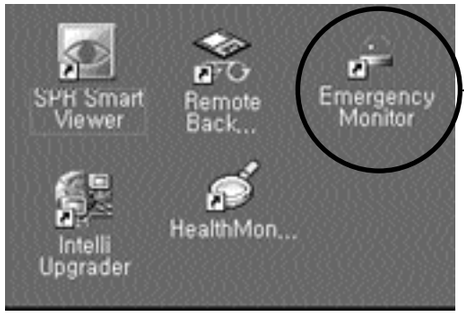
[View - Indicate information of log file]

VII

Emergency Monitor

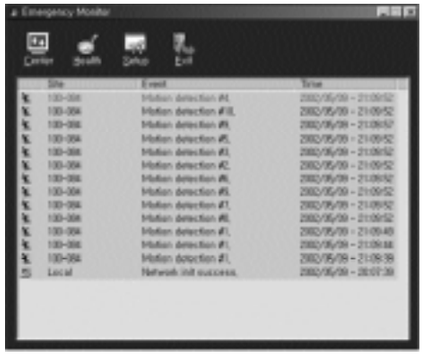
1 Emergency Monitor

Whenever an emergency message is sent via the DNE function, "Motion for Emergency message", a function for real-time reception of emergency message and the SPR Smart Viewer program is used to take the user directly to the DNE experiencing problems.



Execute Emergency Monitor program provided when SPR Smart Viewer was installed on the desktop.

Execute Emergency Monitor



Tool bar

: Tool bar is composed of Setup icon to enable Emergency monitor program with shortcut icon which executes SPR Smart Viewer program and Health Monitor.

Indicate Emergency message

: This will give an urgent message in case of emergency when “Sensor for Emergency” activates.

▶ Urgent message appears if it receives a signal from sensor or image signal is not working properly.

2 Toolbar

Execute Center / SPR Smart Viewer program

: This function executes SPR Smart Viewer program without having to end Emergency Monitor. When you select Urgent message from Emergency Monitor window then click [Center], you can immediately connect to appropriate DNE and execute SPR Smart Viewer program.

Execute Health / Health Monitor program

: Health Monitor program enables to check the status of camera, control equipment (On/Off), and status of data storage. When you select Urgent message from Emergency Monitor then click [Health], you can immediately connect to appropriate DNE and execute SPR Smart Viewer program.

Setup

: This function is to setup Emergency Monitor program. If you select Exit button auto-execution while window is being restarted, it will allow you to setup system tray (icon).

Exit

: End Emergency Monitor program.
It may convert to an icon.

Hide

: Use Icon to Minimize Emergency window without ending program.

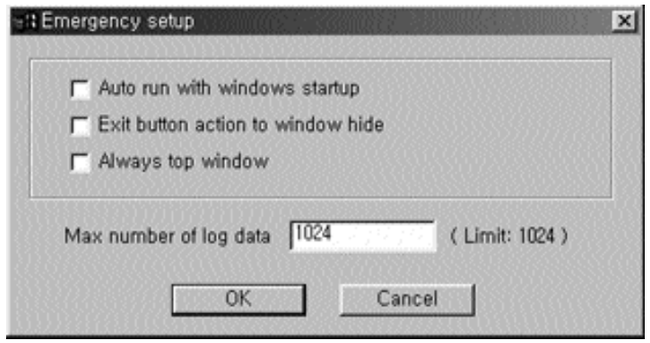
Open (Restore)

: If any messages are received from DNE, minimized emergency monitor program will restore its original screen size and indicate emergency screen message.

▶ Double click on minimized Emergency Monitor icon or right click to restore its original screen size.

[Minimized icon]

Setup



Auto run with windows startup

: It will automatically start Emergency Monitor program when window starts.

Hide only

: When [Exit] button is selected, it will Hide and minimize Emergency window without having to close the program.

Always top window

: Set Emergency Monitor mode on the highest grade.
Emergency Monitor program will always stay on top of other windows.

Max number of log data (Limit : 1024)

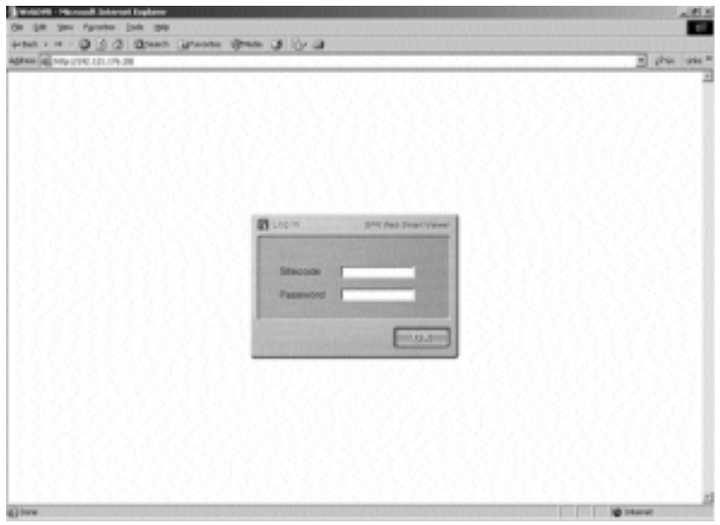
: When indicating emergency message, this will set maximum number to be shown from [Emergency message display window].

- ▶ If the messages are received more than its maximum, then it will overwrite to the old message in the order it was received.
- ▶ You can indicate maximum of 1024 messages received at [Emergency message display window].

Ⅷ

WebDVR

1 Accessing Web DV R



① [Accessing the WebSite]

- Enter the IP address of the web site to access in the address input window.
- Type in the site code and the password, and click on Login button to access the Web Site.

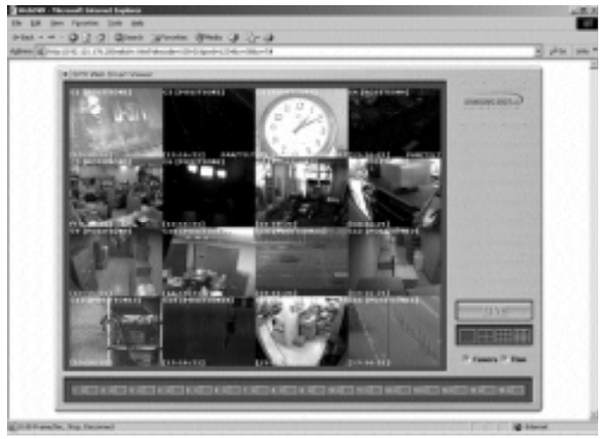
② [Security Warning]

- When he WebDVR program is executed for the first time, the [Security Warrning] message will be displayed as shown below. Select “Yes” when this message appear:

Security Warning
Do you want to install and run "WebDVR" signed on 3/22/2004 10:46 PM and distributed by:
Samsung Electronics Co., Ltd.
Publisher authenticity verified by Thawte Code Signing CA
Caution: Samsung Electronics Co., Ltd. asserts that this content is safe. You should only install/view this content if you trust Samsung Electronics Co., Ltd. to make that assertion.
Always trust content from Samsung Electronics Co., Ltd.
Yes
No
More Info

③ [Site connection]

- As soon as the WebDVR program is connected to the web site, the present video images of the web site are displayed.



☞ **[Notice]**

- Only when Site program v2.1 or higher version is installed, it is possible to connect the WebDVR. When the site program is installed, the WebDVR program is installed.
  (For more information about installation of the WebDVR, see “Installation of the WebDVR” part in the site user manual.)

2 Functions of Web DV R

① If the user clicks on a displayed image, the selected image will be outlined by a blue line.
(The user can zoom in the image by double-clicking on it or pressing 1 division button.)

② The user can stop transmission of the images by clicking on Stop button.

③ The user can transmit images in 1, 4, 9 or 16 division mode.
(The user can transmit image in mother modes by clicking on Camera button at the lower part of the GUI.)

④ The user can decide whether to display the camera number, name, and time information on the monitoring image screen or not.

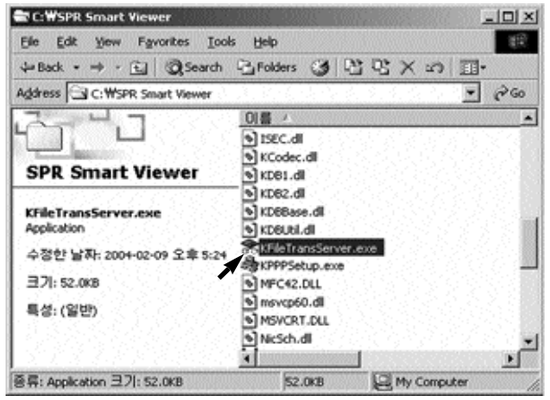
⑤ To display the monitoring image, click on the corresponding camera number.

Ⅸ

Appendix

1 Installing Center PPP in Windows 98

PSTN/ISDN PPP Setup (When No Rounter is Used)



① PPP Setup through KPPPSetup.exe Program

- To set the PSTN, install the modem first in Windows environment and execute KPPPSetup.exe under SPR Smart View and SPR Smart Viewer Program folders. Then, PPP setup for PSTN/ISDN will be automactically made.

② Preparation before Installaiton

- The original copy of Windows98 Edition CD must be in the CD-ROM or files of Windows98 Second Edition must be copied before executing KPPPSetup.exe program.
- If the user tries to execute KPPPSetup.exe program in the system while the modem has not been installed, the settings may not function properly.
- If the modem has not been installed, it is recommanded to install the modem and the modem driver file before executing KPPPSetup.exe

③ PSTN and ISDN Setup in Windows98

- Install the mode for the PSTN or ISDN terminal adapter (TA) for the ISDN.
- Execute KPPPSetup.exe program.
- After PPP setup is completed by the program, reboot the system.
- After the system is rebooted, check if the system is normally connected by the SPR Smart Viewer program and the SPR Smart View program.

④ Setting made by KKKSetup.exe program

- Installation of telephone connection networking
- Installation of telephone connection server
- Installation of the caller
- Installation of the telephone connection adapter
- Installation of TCP/IP protocal
- Change of settings of the telephone connection server

⑤ Other

- If TCP/IP or telephone connection adapter has been installed, the corresponding item does not needed to be installed again.
- Close windows such as “Network Environment Properties”, “Telephone Connection Server”, and “Setup” before executing KPPPSetup.exe program .
- Do not execute KPPPSetup.exe program more than once.
  (To exit the program, wait till System Rebooting message box appears.)
- In SPR Smart View S/W, select “LAN” In “Commutation Setup” field, and in SPR Smart Viewer S/W, select “PSTN/ISDN (No Router)”.
- KPPPSetup.exe must be installed both in SPR Smart Viewer and SPR Smart View S/W applications.
- Access the SPR Smart View from the SPR Smart Vewer and check if the communication status is normal.

☞ **[Notice]**

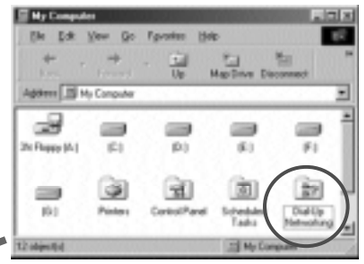
- If Windows98 SE has been installed in the system from the CD-ROM, the system may request the user to insert the original copy for the CD to the CD-ROM. At this time, define the path of the original copy of Windows98 SE CD (the copy folder of Windows98 SE in the hard disk or CD-ROM drive.)
- By executing KPPPSetup.exe program, the user can automatically set up the ISDN in the same way of setting the PSTN although the router is not used and direct connections is made.
- KPPPSetup.exe program must be installed in both the SPR Smart Viewer and the SPR Smart View S/w applications.

① [When there are a few dial-up servers depending on the ISDN modem}

- Basically ISDN setup will be done automatically if you run KPPPSetup.exe. However, there might be cases that you need to setup manually when there are a few dial-up servers depending on the ISDN modem, In that case please follow this step.
- When the ISDN modem supports a few dial-up servers you should select a proper dial-up server that supports ISDN among the dial-up servers.
- Above step should be done after executing KPPPSetup.exe

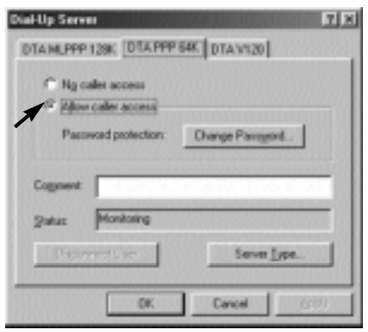
② [Manual Setup]

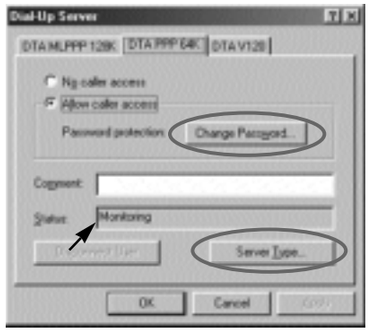
- Select ‘Dial-up networking’ on ‘My Computer’ in background



- ‘Connection’ -> ‘Dial-up server’

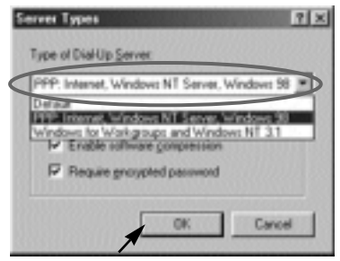
- Choose “Allow caller access”

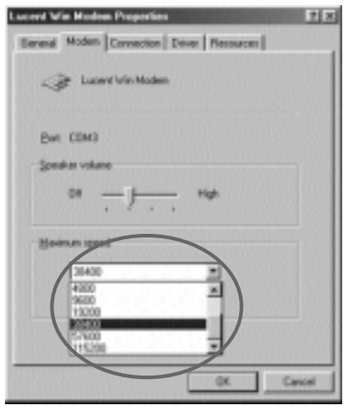




- Enter to change password and input ‘1234’ for all there blanks.

- Choose “PPP”: Internet, Window NT Server, Windows 98” on ‘Server Type’.
- Check “Enable Software Compression” and “Require Encrypted Password” and click “Apply” button and “OK”
- Make sure if there is “Monitoring” in the “Status”. (The type of dial-up server is different depending on the ISDN modem as you see above.)





☞ [Tips] Line speed

- If connection gets disconnected frequently or communication status is unstable when using PSTN, execute "Modem" from "Properties" and select "Register information" from "General".
- From 'Modem register information' window,

➞ Select '38400' for maximum speed if PSTN

➞ Select '115200' for maximum speed if ISDN

- For safety of communication line, modem for center and site should be set to equal.

(Connection may not work well if something like noise and old line etc. are accompanied).

2

Installing Center PPP in Windows 2000/XP

Installation

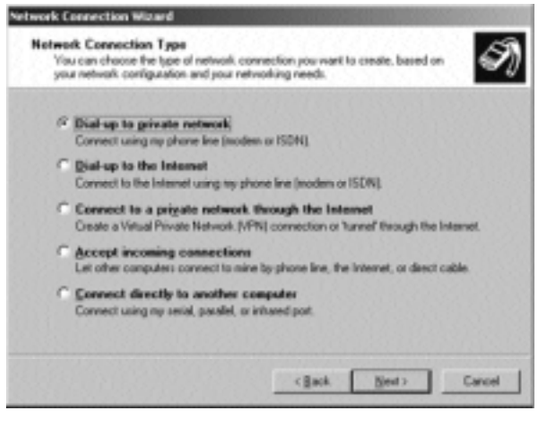
① In most cases, the modem is automatically installed in Windows 2000/XP.
(See the manual of the corresponding modem.)

② Select “Control Panel” and “Network or Dial-up Connection” folder, and click on “Create New Connection” folder (or “Network Connection” in Windows XP).

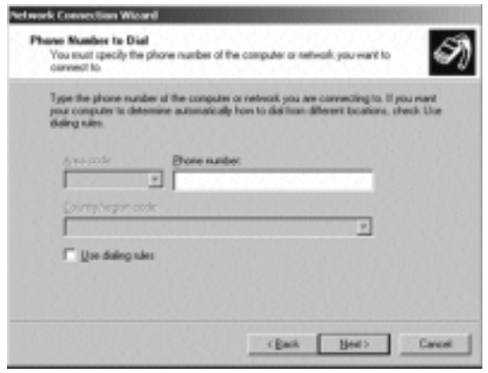
③ Click on “Netxt”.

Network Connection Wizard
Welcome to the Network Connection Wizard
Using this wizard you can create a connection to other computers and networks, enabling applications such as e-mail, Web browsing, file sharing, and printing.
To continue, click Next.
< Back
Next >
Cancel

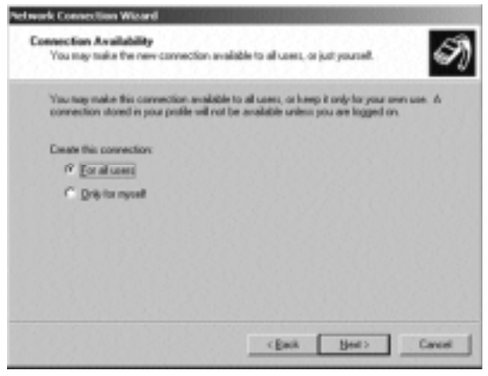
④ Select “Dial-up to private network” and click on “Next” as shown below:


Network Connection Wizard
Network Connection Type
You can choose the type of network connection you want to create, based on your network configuration and your networking needs.
Dial-up to private network
Connect using my phone line (modem or ISDN).
Dial-up to the Internet
Connect to the Internet using my phone line (modem or ISDN).
Connect to a private network through the Internet
Create a Virtual Private Network (VPN) connection or 'tunnel' through the Internet.
Accept incoming connections
Let other computers connect to mine by phone line, the Internet, or direct cable.
Connect directly to another computer
Connect using my serial, parallel, or infrared port.
< Back
Next >
Cancel

⑤ Click on “Next”.


Network Connection Wizard
Phone Number to Dial
You must specify the phone number of the computer or network you want to connect to.
Type the phone number of the computer or network you are connecting to. If you want your computer to determine automatically how to dial from different locations, check Use dialing rules.
Area code
Phone number:
Country/region code:
Use dialing rules
< Back
Next >
Cancel

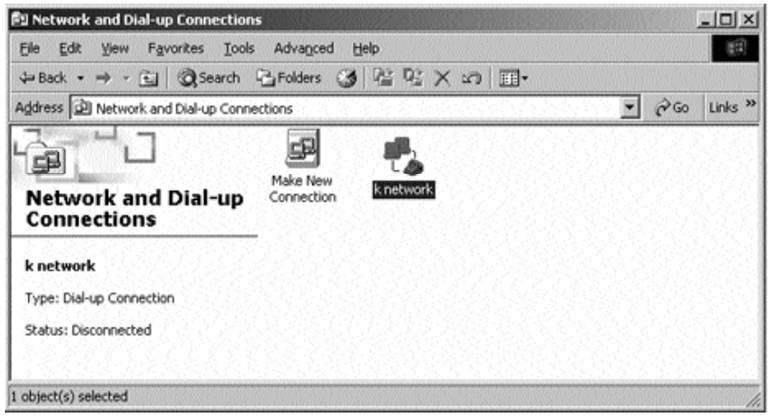
⑥ Click on “Next”.


Network Connection Wizard
Connection Availability
You may make the new connection available to all users, or just yourself.
You may make this connection available to all users, or keep it only for your own use. A connection stored in your profile will not be available unless you are logged on.
Create this connection:
For all users
Only for myself
< Back
Next >
Cancel

⑦ Type in “K Network” and click on “Finish”.

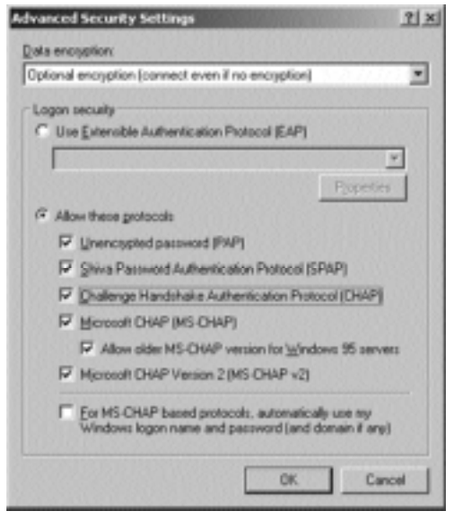
Network Connection Wizard
Completing the Network Connection Wizard
Type the name you want to use for this connection:
K Network
To create this connection and save it in the Network and Dial-up Connections folder, click Finish.
To edit this connection in the Network and Dial-up Connections folder, select it, click File, and then click Properties.
Add a shortcut to my desktop
< Back
Finish
Cancel

⑧ Right-click on “K Network”, and click on “Properties” from the pull-down menu.

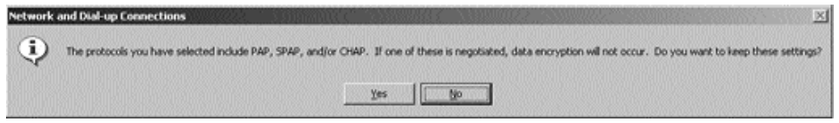


⑨ In ‘K Network Properties’ window, click on “Security” tab, and select “Advanced(custom settings)” Then, click on “Setting”.

⑩ After making settings as shown below, click on “OK”


Advanced Security Settings
Data encryption:
Optional encryption (connect even if no encryption)
Logon security
Use Extensible Authentication Protocol (EAP)
Properties
Allow these protocols
Unencrypted password (PAP)
Shiva Password Authentication Protocol (SPAP)
Challenge Handshake Authentication Protocol (CHAP)
Microsoft CHAP (MS-CHAP)
Allow older MS-CHAP version for Windows 95 servers
Microsoft CHAP Version 2 (MS-CHAP v2)
For MS-CHAP based protocols, automatically use my Windows logon name and password (and domain if any)
OK
Cancel

⑪ When the following message box comes up, click on “No”.


Network and Dial-up Connections
The protocols you have selected include PAP, SPAP, and/or CHAP. If one of these is negotiated, data encryption will not occur. Do you want to keep these settings?
Yes
No

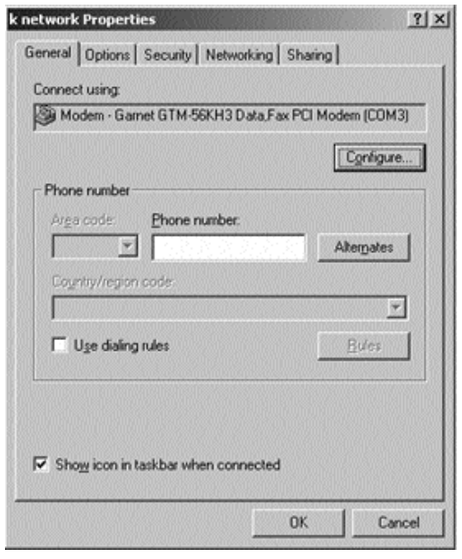
⑫ In “K Network Properties” Window, click on “Networking” tab and double-click on TCP/IP.

k network Properties
General Options Security Networking Sharing
Type of dial-up server I am calling:
PPP: Windows 95/98/NT4/2000, Internet
Settings
Components checked are used by this connection:
Internet Protocol (TCP/IP)
File and Printer Sharing for Microsoft Networks
Client for Microsoft Networks
Install...
Uninstall
Properties
Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
OK
Cancel

⑬ Select “Obtain an IP address automatically” as shown below, and click on “OK”,
Then, this window will be closed.

Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

⑭ In ‘K Network Properties’ window, click on “OK” to close the window.



⑮ Run “SPR Smart Viewer” program.

3 Form at CD diskette using Direct CD

[Formatting CD using Direct CD]

When you try to backup on an unformatted CD or in case where the message of backup failure has shown, format the CD as follows.

※ Below contents is based on Direct CD v5.1. If some other message comes up, please refer to Direct CD manual.

CD format and backup

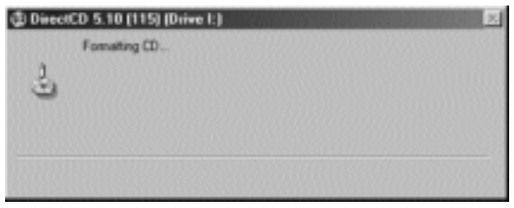
① Select [Media Select] button in “Backup Media” -> Select CD-R/RW drive in “Local Drive”-> Click [OK]

② Insert empty CD-R/RW media and click [Format CDR/CDRW]
(If CD-R/RW drive is set as “auto” Direct CD program will run automatically.)

③ Check if CD-R/RW is selected when the Direct CD format utility comes up, Direct CD and click [format CD]

④ When you see a “drive format” window, input a name to “Label” and click [Start Format] button

⑤ “Formatting CD..” Window will appear and starts CD-R/RW media format.



⑥ When the format is done, below window will appear saying “CD Ready”. Then click [OK]

⑦ If Direct CD format utility windows come up, click this button to close..

(Do not click [eject] button.)

⑧ Select the type, time, and camera for backup and click [OK] button.

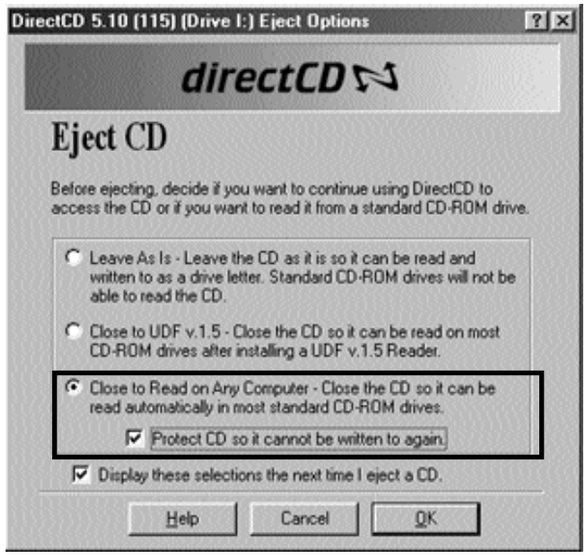
“WRITE” LED of CD-R/RW will be turned on till CD writing is done.

Do not press button in CD-R/RW

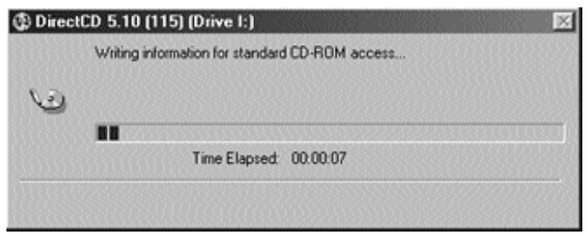
⑨ Once the backup is done, click “Eject” button in CD-R/RW

⑩ If “Direct CD Eject Options” window comes up, select “Close to Read on Any Computer” and click “OK”

(If possible select “Protect CD so it cannot be written to again” not to re-write on CD-RW)


DirectCD 5.10 (115) (Drive I:) Eject Options
directCD
Eject CD
Before ejecting, decide if you want to continue using DirectCD to access the CD or if you want to read it from a standard CD-ROM drive.
Leave As Is - Leave the CD as it is so it can be read and written to as a drive letter. Standard CD-ROM drives will not be able to read the CD.
Close to UDF v.1.5 - Close the CD so it can be read on most CD-ROM drives after installing a UDF v.1.5 Reader.
Close to Read on Any Computer - Close the CD so it can be read automatically in most standard CD-ROM drives.
Protect CD so it cannot be written to again.
Display these selections the next time I eject a CD.
Help
Cancel
OK

⑪ Below window will appear to close CD-R/RW media. Wait until this procedure ends.



⑫ Once the above procedure ends below window will appear.

Then eject the CD-R/RW media and click [OK] button.

DirectCD 5.10 (115) (Drive I:)
CD ejected!
The CD you just ejected from drive (I:) is readable in all CD-R/CD-RW drives and MultiRead CD-ROM drives.
Display this notification again.
OK

4 Form at CD using InCD

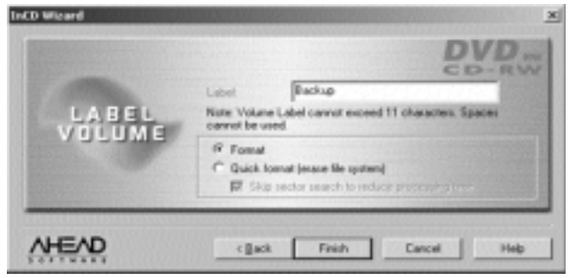
[Formatting CD using InCD

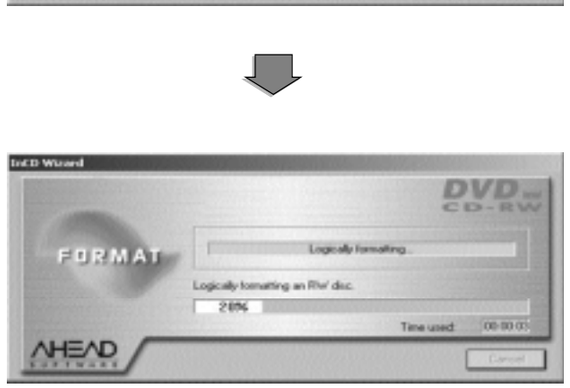
- When trying to back up data in an upformatted CD or receiving an error message after trying to back up data, format the CD by the following procedure:
- Insert a blank CD, and click on "Format CDR/CDRW" from "Data Backup" window. Then, the following screen will appear. Click on the "Next" button.

- Drive selection window will appear. Click on the "Next" button.

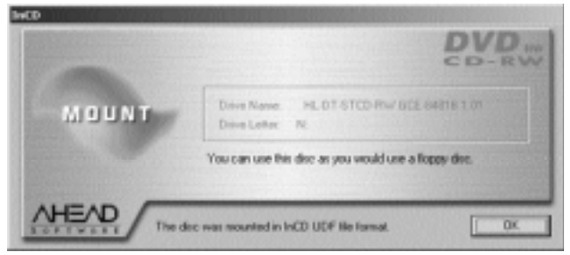
- Disc information window will appear. Click on the "Next" button.

• Set the CD name.
(If you do not want to define the CD name, simply do not enter the name.)
After entering the CD name, click on the “finish” button.





• *After the CD is completely formatted, the following window will appear.*
(Click on the "Confirm" button to complete formatting.)



• After the CD is completely formatted, you can backup on it following the same method as for HDD or removable drive backup.
If a different message from the above is displayed, refer to InCD manual.

☞ **[Notice]**
- To format a CD using InCD S/W, only CD-RW discs can be used. It is impossible to format CD-R media using InCD S/W.
- The operating method and the setting screen differ by InCD S/W versions.

5

System setup for Audio function

Audio volume setup for voice recording

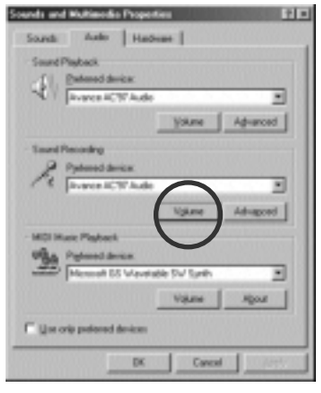
Prior to recording voice, you need to first control audio volume for microphone.

Go to 'Start → Program → Application → Entertainment → Volume Control'

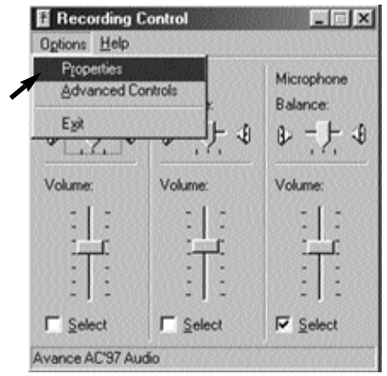
Setup

① Execute 'Multimedia' in Windows control pannel.

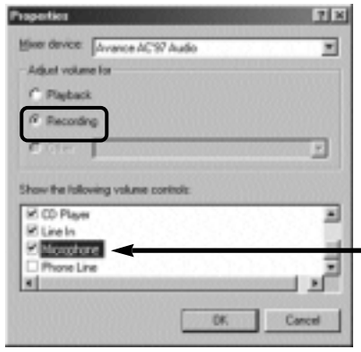
② Click "Recording" in Multimedia properties by clicking "Recording"button.



③ If the Recording window appear, go to 'Option->Properties'

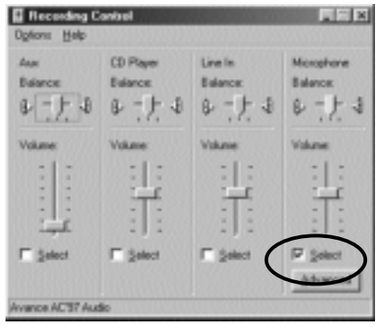


④ Select 'Microphone' in 'Properties' window and click 'OK'.



In order to use voice recording function "Microphone" should be set from "Properties" tap.

⑤ If you click [OK] below 'Microphone balance' will appear in the 'volume Control' window.



[Notice]

- If you don't tick on the check box of 'Microphone', audio recording will not work properly.
- For proper use of Audio recording and two-way audio function above setting should be made both Viewer and View.

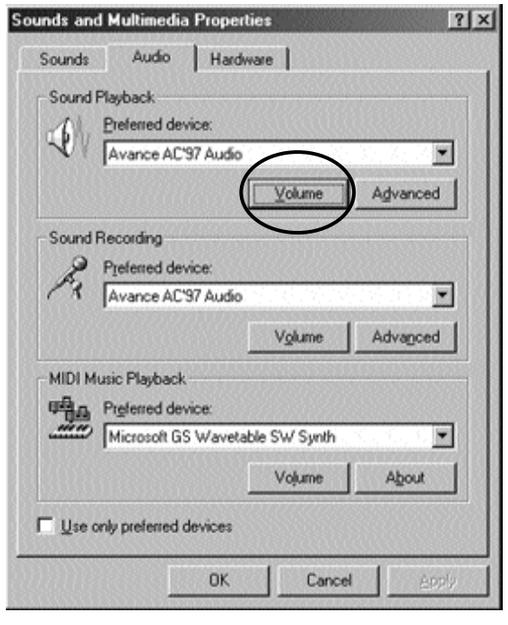
PC setup for use of Microphone from advanced mode

▶ For audio recording following volume setup should be made for microphone.

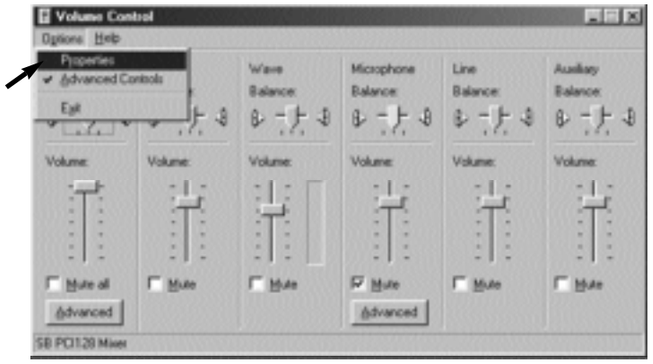
▶ When the audio input through microphone is weak even in the maximized volume you can amplify the audio input by adjusting as follows.

Setup

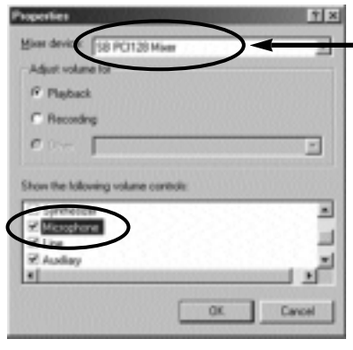
① Execute 'volume control' window by following "control panel-> Multimedia-> properties'



② Go to 'Options → Properties' then, below window will appear.

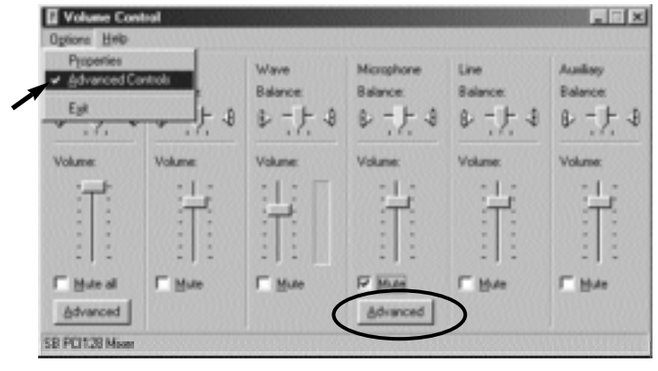


③ In order to use voice recording function "Microphone" should be set from "Properties" tap.

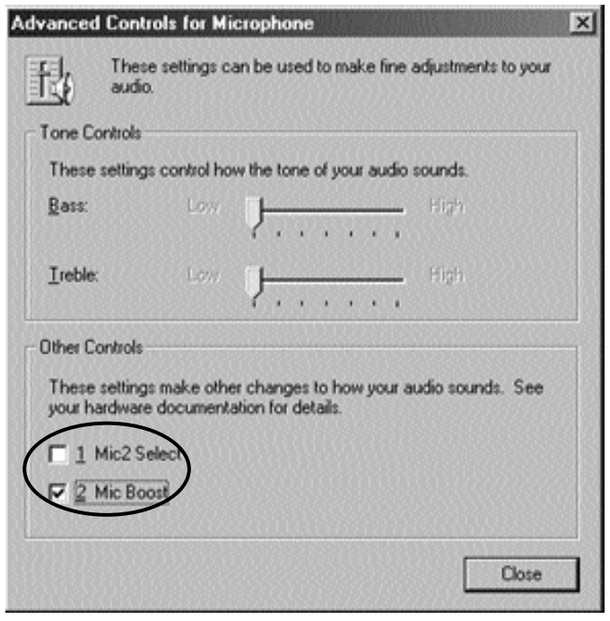


Soundcard mixer is installed in the system.

④ You can go to 'Advanced Controls for Microphone' by clicking 'Advanced' on 'Microphone' taps in 'Volume Controls'.



⑤ Please adjust the options to fit into your system and check the sound output from 'Other Controls'.



[Note]

- Click on 'Mute' which is circled on the left picture, if you do not want any voice output from a speaker that was inputted to the microphone but record the voice only or if you just want the output of searched voice from the speaker only hen installing a microphone.
- When the system doesn't support 'Microphone Boost' function, 'Advanced' button may not appear. In that case you can solve it by using a more sensitive amplified microphone.
- Sound card must be installed properly to use voice recording function.

2Way Audio Function will not work if,

- Your voice will not transmit to a receiver if "microphone" is not selected from " Recording Control"
- 2Way Audio cannot be connected from DNE to Remote. (2Way Audio Connection is possible from Remote to DNE)
- 2Way Audio function cannot be used if Remote is not connected to DNE.
- 2Way Audio connection will end if you disconnect the most active DNE among several DNE from Remote or switched to other DNE.
- If you end the connection for SPR Smart Viewer program then 2Way Audio function will end as well.
- You cannot use 2Way Audio function if you do not have sound card or if sound card driver is not installed.
- If a sound card does not support Duplex Audio, you cannot use 2Way Audio. In other words, you should be able to hear sound (Wave) when recording Microphone (Most recent sound card supports Full Duplex Audio).
- If you are using recording function from other software, you cannot use 2Way Audio function (Audio input by using microphone from sound card can only be used from one logical program at once).
- If a sound card does not support to mix several sound sources at the same time then, 2Way Audio function will not operate normally.
  (For example, when using Audio program while trying for 2Way Audio connection, 2Way Audio will not operate properly if the sound card does support the function.)